

See Dated in!
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Auctions
This Issue!

Deadline for Next Issue: October 1st

July, 1992 Summer Issue (Mailed mid-August)

"One Wonderful Night for Radio Fans" - The Phonograph In	ndustry
Confronts Radio	
Obituaries	8-9 & 16
Phonograph Forum: Science and the Talking Machine	
The Edison Blue "Damberol" Cylinder Records	
Life in the Orthophonic Age: About Tone and Tone Arms (I	Part II)
A Tribute to Lew Green = Last of the Green Brothers =	
Curiosity Corner: A Vitaphone Variation	
In Review (recent books)	
Here and There	
Record Cleaning	
Calendar of Events	

July, 1992 (Summer)

Vermont Sub-

scriptions

are \$8.40.



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Editor's Notes

WHAT A SUMMER! A large addition is going onto 37 Caledonia Street. Ultimately, I hope, it will help serve New Amberola customers better and in a more timely fashion. Another goal is an improved look to the GRA-PHIC. But these things will fall into place eventually. In the meantime, I'm having to deal with more headaches and stress than I was prepared for (subcontractors arriving at 4 A.M., plaster and sheetrock dust everywhere, neighbors complaining because their telephone lines were cut, delays on windows, damage to neighboring property, going over budget, etc., etc.).

I can only apologize for the delay in this issue, as well as for back numbers. Don't hold your breath, but I think the situation will improve! However, I also know that stress is unhealthy, and I can't afford to let the situation get the best of me.

Here's something you can look forward to. Our next issue will feature a piece by Ray Wile about the Edison company contemplating a return to the record business in 1939 -sort of. Stay tuned! - M.F.B. "One Wonderful Night for Radio Fans" The Phonograph Industry Confronts Radio

by James R. Tennyson

In February, 1925 the gauntlet was flung by William Brady: "The theatre, the phonograph, and the radio are in combat to the death," he asserted at a meeting of New York theatre producers, technicians and actors. "Who wants to hear disembodied voices playing dramatic scenes?" he asked. Unfortunately, the answer for him in 1924-25 was virtually "Everyone!" Radio was soaring. And soaring with the help of quite a number of "phonograph favourites," I might add.

Just how many was a discovery I made through the pages of Radio Digest, a weekly tabloid published in Chicago during the 1920's. This was a programme guide complete with technical articles and gossip about "your radio favourites." The programme listings are amazing in their breadth: weekly listings for all the stations of the United States and Canada! In those pre-network days of much fewer stations and clearer frequencies, the radio listener settled in, after dinner, to an evening of roving the continent via his radio. The Toronto daily newspapers, for example, listed the continent's stations complete with the air-miles from Toronto with the Toronto locals. From our perspective in these days of a crowded AM band, we have forgotten just how efficient AM radio can be in terms of distance.

So, what did they hear in the fall of 1924 as they turned up the rheostat, checked their batteries and tuned in? If you liked dance music you were in clover, and no need to crank or change needles. A typical evening in the week of October 4th, 1924 reads like a phonograph "Who's Who" of the late acoustic era:

Joseph C. Smith & His Mount Royal Hotel Orchestra (CKAC, Montreal) Jack Chapman & His Drake Hotel Orchestra (WGN, Chicago) Art Hickman & His Orch. (KHJ, Los Angeles) Austin Wylie and His Vocalion Recording

Austin Wylie and His Vocalion Recording Orchestra (WJAX, Cleveland)

Clarence Williams and His Radio Trio (WHN, New York)

Meyer Davis and His Belvedere Stafford Orchestra (WFI, Philadelphia)

Vincent Lopez and His Hotel Pennsylvania Orchestra (WEAF, New York)

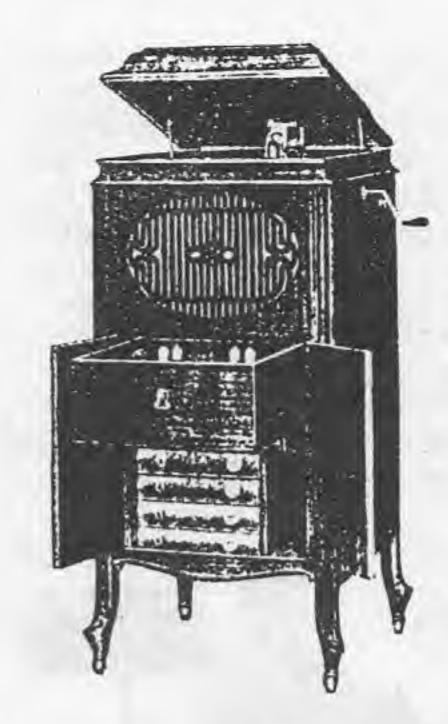
Isham Jones and His College Inn Orchestra (WLS, Chicago)

Joseph Kencht and His Waldorf-Astoria Dance Orch. (WJZ, Sundays), and in disguise as the Goodrich Silvertown Cord Orchestra

the Goodrich Silvertown Cord Orchestra Luigi Romanelli and the King Edward Hotel Orch. (CNRT, Toronto)

Paul Specht and the Hotel Alamac Orchestra (WHN, New York)

But the band you did not miss was the Coon-Sanders Original Nighthawk Orchestra on KYW, Chicago. These broadcasts would have been called a true "media event" -- had the



Brunswick acknowledged radio early with this Brunswick-Radiola combination model #212 of early 1924

term been coined in the 20's. In those pre-FAX days, Carlton Coon and Joe Sanders had a Western Union teletype printer installed on the bandstand so that they could receive greetings and requests from literally across the continent. Telegrams were cheap and quick in those days, and listeners were thrilled to be acknowledged on the air. As the duo sings on Victor Record #19360, the recording of their theme "The Nighthawk Blues," "...tune right in on your radio/Grab a telegram and say Hello!" The correspondants to the humour column of Radio Digest were addicted to parody verse, and here is one paen to Coon-Sanders:

Backward turn backward time in thy flight,
Make me a Nighthawk and do it tonight.
For I'm not young like I used to be,
And Coon-Sanders music sounds pleasant to me.
It makes my wife growl 'cause I won't go to bed,
And she says Radio has gone to my head...

The gossip columnist of Radio Digest wasn't swayed by this. He liked Jack Chapman, another Victor artist of the late acoustic period. "Let me tell you something you may know, -- some don't. you are in search of dance music but want it good. Try them all out; there's plenty of orchestras playing jazz and other dance music, yet nine times out of ten you'll turn back to WGN to get Chapman's Orchestra."

The "radiophans" weren't the only ones listening in 1924. It would seem that the Victor Talking Machine Company's Artist and Repertoire Dept. had taken to the radio. An item dated Jan. 31, 1925 indicates they were listening in: "Dick Long Makes Record. Minneapolis. The first Minneapolis orchestra to broadcast by remote control and the first local ocrhestra to make Victor Records are distinctions held by Dick Long's Nankin Cafe Orchestra. Recently they were selected to record for the Victor Company. The records were released last week when the Gold Medal station WCCO broadcast four special programmes by Dick Long and His Orchestra."

But dance band fans weren't the only group that was being serenaded by their phonograph favourites. CKAC in Montreal seems almost to have been the Compo Company's Apex label on the air: Rex Battle, pianist; Benjamin Scherzer, violinist, The Ted Brown Trio, and many others. Vocal fans had their choice of many

established favourites: Billy Jones and Ernie Hare on WEAF; Roxy and His Gang with Gladys Rice every Sunday 7:20 to 9:15; the Eveready Hour (what better way to sell batteries— advertise them while the audience uses them up listening!) with the Eveready Mixed Quartet: Wilfred Glenn, Rose Bryant, Beulah Young and Charles Harrison. The Toronto Star's radio writer said, "WEAF sent out one of their finest programmes that has yet been broadcast from any station by the Eveready Quartet..." which, if not quite grammatical at least shows that they were appreciated by the audience.



Here is the Eveready Mixed Quartet heard every Tuesday evening through WEAF consisting of Wilfred Glenn, bass; Rose Bryant, contralto; Beulah Young, soprano; Charles Harrison, tenor; and Tom Griselle, planist.

This is not a photograph of a rehearsal of the Victor Light Opera Company, even though it might well be one, give the participants!

But a continual complaint seems to have been that the "great artists" had yet to broadcast, and Victor was seen as a major impediment, although not the only one. When Lucy Gates, a Columbia artist, sang in Toronto on Feb. 12, 1925 with the Eaton Choral Society, CFCA broadcast the concert. The next day the radio writer for the Star complained how annoying it was to have her solos cut out of the programme "because of her contract with a record company." It seems an exclusive recording contract imposed radio silence unless the company gave its blessing. But it was not strictly true that the "great artists" hadn't been heard on the air. Chicago heard live broadcasts of the Chicago Opera Company in the early twenties. Edith Mason of that



Proof positive that the major artists were in front of the microphones before Victor gave its blessing to the process. But Edith Mason of the Chicago Opera Company was not one of the Red Seal Artists, so it seems that the public did not view Brunswick Hall of Famers in the same reverential light reserved for the Victor stars. This indicates, too, that Brunswick must have viewed their exclusive contracts a trifle more casually that Columbia and Victor. (Radio Digest, December 6, 1924)

company and a Brunswick star regularly made broadcasts -- if Radio Guide is to be trusted. So did Anna Case, Edison's answer to Geraldine Farrar, but for some reason these didn't count with the general public.

But things were about to change. Bruns-wick was the first to break and sponsor "The Brunswick Hour" in 1924-25. "The Brunswick Hour is the new feature of stations WRC, WJZ, WGY, KDKA, and KYW. The programme will be broadcast in New York and relayed by other stations every Friday evening at 9:00 P.M. central standard time. Opera lovers will hear again many famous stars. The program this Tuesday lists Claire Dux and John Charles Thomas. Leopold Godowsky, pianist, and the Elshuco Trio wil also be on the program."

The Brunswick Hour, which should have rewarded the Brunswick-Balke-Collender Co. with reams of laudatory press clippings, had the misfortune to debut the same week -- December 27th, 1924 -- that the Victor Company decided that it was time to officially acknowledge the existence of radio. And when they did, it was with a bang, on New Year's Night, 1925 with a roster of artists and a barrage of publicity that only they could command. Victor decided that John McCormack, the most famous tenor of the day, and Lucrezia Bori, the darling of the Metropolitan Opera, would just do the trick. It succeeded beyond Victor's most sanguine expectations.

In Toronto the publicity started with an expensive ad in all the dailies from the R.S. Willaims Company:

World Famous VICTOR Artists Now to Sing for Radio

On January 1st, 1925 at 9 p.m. one of the most important events in the history of Radio will be broadcast from station WEAF, New York. For the first time Victor Red Seal Artists will be "on the air"... The fortunate owner of a Radiola will now be able to hear the world's greatest artists..."

A musical event was brewing. One of the large department stores made the last minute offer to get a radio into your parlour...

"Simpson's will install Any Radio Set Wednesday (tomorrow) in your home so you can hear the greatest musical event ever heard over the air: the Victor Artists..."

The front page article in Radio Digest continues the saga:

Victor Artists Get Approval of Fans
Radiophans throughout the country were
treated New Year's Night to one of the
best programs which has ever been broadcast from any station in the country...
E.R. Johnson, president of the Victor
company, has done much to establish music on a higher plane in this country
is responsible for the recitals which
will be given from time to time during
1925.

The article goes on to describe the broadcast which was, by any standards, elaborate. The first presentation was by Louise Stallings lyric soprano and Jorgen Bendix, "the famous

5.

Danish baritone." This was followed by the Victor Salon Orchestra playing "Out of the Dusk" and "Chanson Boheme." And then came McCormack. The <u>Toronto Star</u> reporter was beside himself with delight. He had almost too much to listen to that night: Toronto had a mayoral election that day.

"The first continental broadcast was a red letter one for local radiophans. Mayors aren't elected every day nor is John McCormack and Lucrezia Bori heard on the air every night. Last night's broadcast was highly satisfactory. The special New Year's Broadcast of the Victor vocalists, musicians and orchestra was the best balanced concert ever heard on the air ... Then came McCormack. His first number, Adeste Fideles was sung with the fervour McCormack knew as a choir boy in Dublin years ago. His 'Berceuse" from Jocelyn was more passionate and romantic ... And then came a spoken voice with an unmistakable Irish broque, 'And now I want to wish a "God Bless You" to my first radio audience.'"

After the Bori-McCormack duet, the <u>Star</u> writer went into raptures, describing himself as part of "...the greatest and most sympathetic audience that ever listened to a duet."

The radio audience was wowed, and the radio columnists were outdoing themselves in terms of ecstatic prose. Poor Brunswick didn't have a chance.

Not only was the public acclain gratifying to Victor's ears, it was pleasant to their account books. To quote Radio Guide:

McCormack Songs Help Record Sales Direct evidence that the Bori-McCormack broadcast on New Year's night caused a tremendous increase in the sales of Victor records comes in the form of an announcement by the Victor Talking Machine Co. While no official figures have been complied, the recording company is happy in the very encouraging results. One of the leading music stores here (New York) reported a large increase in the sale of Victor records by both artists. Particularly noticeable is the increased popularity of "All Alone," a McCormack record which had sold poorly since listening-in became popular, and until the New Year's concert.*

So in the first skirmish with radio Victor won. The free publicity lavished on the Victor Company was amazing. The <u>Star</u> ran a photograph of McCormack rehearsing at the mike for the broadcast. Not on the radio page as you might expect, but in the News of the Week section...at the top of the page. Suddenly Victor's concerts which were originally to be given "from time to time" became a regular programme every two weeks. Victor realized they were on to something. If listeners wrote after the concert they received a reproduction autographed photo of the principals of the broadcast. By January 31, Vic-

tor, McCormack and Bori had received a whopping 60,000 letters, and they were still coming in.

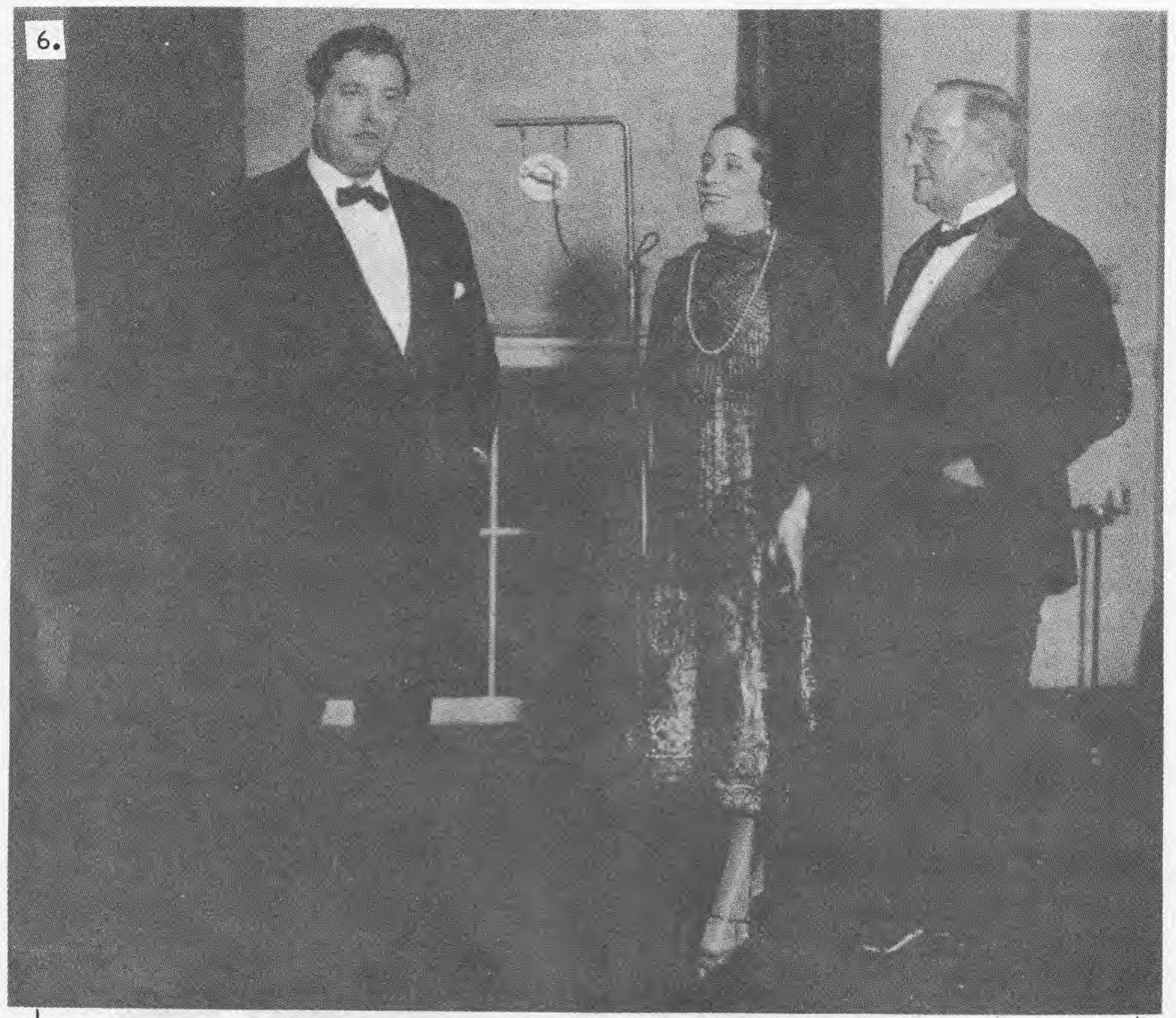


R.S. Williams began their association with mechanical music as the Canadian jobber for the Edison Phonograph, but by 1924 the Diamond Disc had ceded pride and place to the Westinghouse Radiola and the Victor line. Consequently, their advertising department produced a major advertisement for the first Victor Hour. (Toronto Daily Star, December 30, 1924)



John McCormack, famous Irish tenor, one of the concert stars who made their radio debut from WEAF on New Year's Day evening, is shown rehearing before the microphone for the occasion

^{*}In her book, I Hear You Calling Me, Lily Mc-Cormack says of the broadcast, "It came over the air perfectly and caused quite a sensation. The next day the stock of the radio company went up 14 points."



John McCormack and Lucrezia Bori broadcasting New Year's Day, 1925. At the right is Calvin Child, who began his career with Victor more than two decades earlier as announcer at the beginning of "pre-dog" records.

The second concert featured Frances Alda and much more lavish advertising in Canada, at least, than the first concert. After the final number the Star's writer was again thrilled to hear his favourite speak on the air: "...and then a gentle voice very softly spoken was heard to say, 'If we have given you - my unseen audience - as much pleasure as it has given me to sing to you, it will have afforded me one of the greatest pleasures of my career. Good night, and God bless you all.'"

Victor hit again for their third concert with a lineup that only they could command: Miguel Fleta, tenor, The Flonzaley Quartet, and Lucy Isabelle Marsh. Graham McNamee, the announcer, introduced our soprano in a way which acknowledged the size of the talking machine audience: "Miss Marsh, though known over all the world by the phonograph public, is known in Providence, Rhode Island as the

devoted wife of Dr. Gordon of that city."

February 12th saw violinist Renée Chemet and veteran recording artist Emilio de Gogorza at the microphones of WEAF. Nothing like overkill -- and Victor by that point would have been thinking, "We've got a new Victrola in the works that'll make your radio sound like a penny whistle." And they were right: the horn speakers of 1920-25 were no match for the Orthophonic Victrola. These broadcasts, too, might have been considered a good way to introduce their star properties to the microphone, which by February would have been appearing in the studios at Camden. The broadcasts would have been great morale build-

At Right (top): Phonograph artists on the radio advertising rubber radio products, and of course the Silvertown Cord tire.

(bottom): "One Wonderful Night" for the Victor Company as well. This quite elaborate ad from Montreal shows that Victor realized they were on to something here...



Goodrich Hard Rubber Radio Panels, Goodrich V.T. Sockets, Goodrich Variometers Unwound. Radiophone Ear Cushions, Spaghetti Tubing Battery Mats.

Better Reception

The Silvertown Cord Orchestra (above) under the direction of Joseph Knecht, has been delighting millions of lovers of

Knecht, has been delighting millions of lovers of
good dance music in programs broadcast every
Tuesday night from 10
to 11 from WEAF, N.Y.;
WJAR, Providence;
WFI, Philadelphia;
WCAE, Pittsburgh;
WGR, Buffalo; WEEI,

nonager, Pemelle, Schumens-Holai, Scotti, Whitakil, Paul Whitaman, Richard Crophs, Shorom Quartet (Penultys Same, Lawie James, Elliett

Boston.

Science has established a big fact in radio—dielectric losses reduce range and selectivity.

Hard Rubber has the lowest dielectric losses of any practical panel material yet employed. Goodrich Hard Rubber Panels are distinctly superior in permanence of color and lustre, and freedom from warpage. Use them in your set and bring in those distant stations finer—get better reception and enjoy to a greater degree the big dance orchestras, soloists, orators, and other features.

For maximum selectivity and widest possible range use Goodrich Rubber Radio Products. Fifty-five years' experience is behind them—they represent highest rubber quality.

THE B. F. GOODRICH RUBBER COMPANY
ESTABLISHED 1870 Akron, Ohio

Goodrich RUBBER RADIO PRODUCTS

"Best in the Long Run"



Heintzman & Co., Ltd.

193 Yonge Street

Mason & Risch, Ltd.

230 Yonge Street

The following firms maintain high-class Victrols Departments.

Nordheimer Piano & Music Co., Ltd.

220 Yonge Street

The R. S. Williams & Sons Co., Ltd.

145 Yonge Street

To our petrons who have

not yet purchased Radio Sets, we extend a cordial

invitation to inspect our large assortment of models

and accessories.

ers while Victor re-tooled.

As we see, the worlds of the phonograph and the radio were beginning to overlap pretty strongly at this period, and would increase as radio personalities like Dick Long, Ford and Glenn, the A&P Gypsies and Lee Sims went from the radio stations to the recording studios. But in early 1925 Victor took on the interloper and fared not badly indeed, smoothing the jitters surrounding the change from acoustic to electrical recording, which like radio was a reality that Victor realized was here to stay.

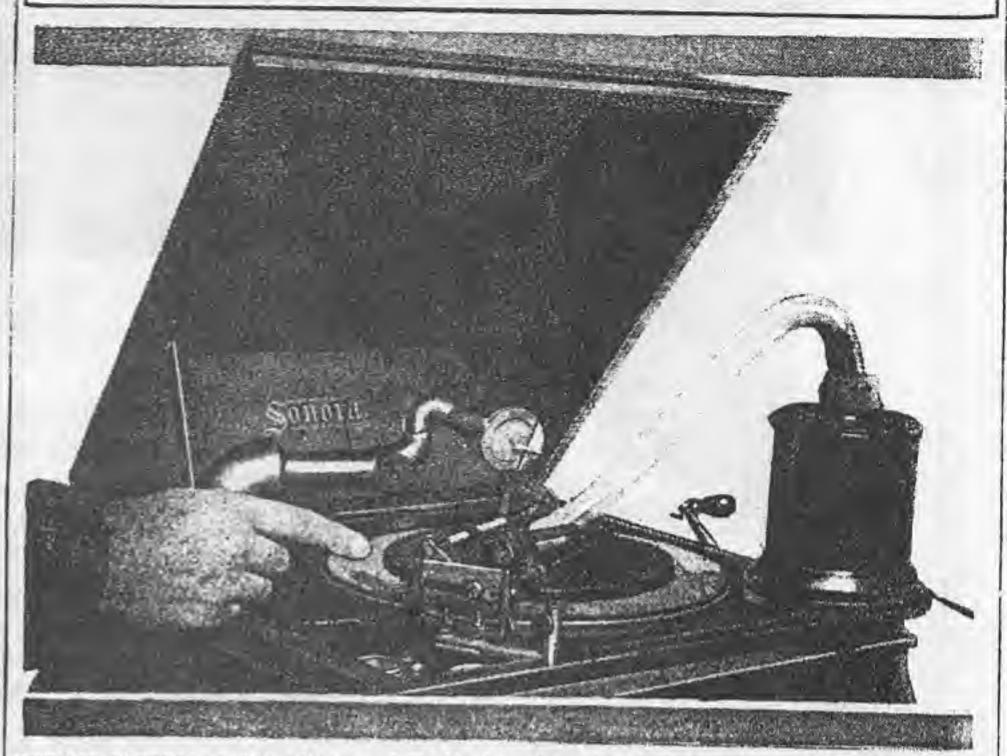


In this February, 1925 advertisement, Charles Freshman attempts to capitalize on Victor's successful programming, but in view of the mass of free publicity that Victor garnered from the daily press, it was only fair.

It is a pity that all these broadcasts are lost: they went sailing into the ether, passed through the horn speakers of the domestic Atwater Kents and vanished. Remember, though, that WEAF, the "Voice to the Millions Station," was owned by the American Telegraph and Telephone Company, whose research facility, the Bell Laboratories, had just developed electrical recording. Surely they must have made a few off-the-air tests as the final touches were put on the new system. The news photo of McCormack I mentioned was made at a "rehearsal before the mike." I mean, they certainly had the opportunity ... it would be fascinating to discover a test pressing of a Victor Hour of 1925 - or the Eveready Hour or virtually any of those tantalizing listings in Radio Digest. This "radiophan" would like to hear samples of his phonograph favourites on the air.

Jim Tennyson is a Canadian collector, residing at 335 Markham St., Toronto, Ont. M6G 2K8

RECORDS BROADCAST SPEECHES



Purther advance in the science of Radio broadcasting is inevitable—it is also inevitable that broadcasting as we know it will eventually be discarded as too crude. And so, the device shown above has been perfected to record broadcasts on wax records so that they can be stored away for future use.

This home recording device attached to the domestic Sonora and what appears to be the base of a Western Electric loud-speaker could provide us with a shadow of all those lost broadcasts, but given how soft the blanks would have to be, there is little possibility. (Radio Digest, January 31, 1925)

Obituaries

Edna White and Elizabeth Lennox both became Edison artists less than a year apart, and they both died within a few weeks of each other, both in their late nineties. Miss Lennox did most of her record work during the acoustic period, though she returned to Edison in 1929 for a rare electrical recording session. Her talent was more widely distributed on most major and minor labels under the pseudonym Louise Terrell (also Terrall). Tom DeLong tells us that the name was adapted from her mother's family name, Tyrrell — a prominent musical family in the Toronto area.

Welk's output on the Vocalion, Okeh, and Decca labels of the lare 30s and early 40s. However, he began recording for Gennett with a snappy dance band in 1928 waxing a tune called "Spiked Beer" (the "Champagne" came later!). He also appeared on the Champion label as George Tucker and His Novelty Band.

Other recent deaths: Allan Jones, 83, father of singer Jack Jones, made an unissued recording for Victor in 1930. His break came in the movies when he sang "Cosi Cosa" in the Marx Brothers' film "A Night at the Opera." He became a Victor Red Seal artist in 1938.

Alfred Drake, who starred in the original "Oklaho-ma!", "Kiss Me Kate," and several other shows, died recently at the age of 78.

Johnny Shines, 76, the last of the original Delta blues guitarists, died in Tuscaloosa, Alabama, in April. He spent his youth in Mississippi playing acoustic blues with such musicians as Robert Johnson. Later, he was rediscovered by blues historians and

played in festivals.

Edna White Chandler, trumpet virtuoso,

GREENFIELD — Edna White Chandler, 99, a resident of the Buckley Nursing Home, formerly of the Weldon House at 54 High St., died Thursday (6-25-92) at the home.



CHANDLER

She was born in Stamford, Conn., Oct. 23, 1892. She was a 1907 graduate of Juilliard School of Music in New York City.

She spent her early years in Athol where her father worked for the

L.S. Starrett Co. She made her debut as a cornet soloist at a church in Waltham.

Mrs. Chandler was a child prodigy and trumpet virtuoso, making her debut in Carnegie Hall in New York City at age 8.

She had lived in Greenfield since 1967.

Mrs. Chandler was a soloist and part of a brass quintet during summer seasons at a auditorium in Ocean Grove, N.J., from the age of 8 until she was 18.

She played on one occasion for John Phillip Sousa and on another for President Herbert Hoover.

She recorded for three record companies and was on radio station

WOR in New York for two years. She was a distinguished Edison Recording Artist.

Although her last concert, "Farewell to My Trumpet," was at Carnegie Hall in 1956, she remained active as a writer and composer into her 90s. "Suite for Trumpet and Orchestra" was premiered by the Pioneer Valley Symphony Orchestra in Greenfield in 1984 and her recollections of her days on the vaudeville circuit, "The Night the Camel Sang," was published locally in 1989.

Pioneer Valley Symphony conductor Nathan Gottschalk, who worked with Mrs. Chandler in preparing for her 1984, said this morning, "She was a very, very vibrant lady. She was so enthusiastic about what she was doing. That was probably what kept her alive. She was just a remarkable lady."

In recent years she wrote a manual on trumpet technique and several small books of poetry. She continued to play the trumpet into her later years.

Mrs. Chandler attended the First Baptist Church. She was a member of the International Trumpet Guild and the Massachusetts Republican Party.

Survivors include two sisters, Gladys White McFarlane and Irene White Nordstrom of St. Petersburg, Fla.; three nephews; two nieces and several grandnieces and grandnephews. A son, Douglas, died earlier.

A memorial service will be held at a date and time to be announced.

Walker Funeral Home is in charge of arrangements.



Champagne Music Maker Dies

LOS ANGELES (AP) — Lawrence Welk, the "wunnerful, wunnerful" champagne music master who struck up his band with "ah-one, an' ah-two" for a generation of TV viewers, has died at 89.

Caledonian-Record

Welk had pneumonia and died Sunday night at his home in Santa Monica, said spokeswoman Bernice McGeehan.

"The Lawrence Welk Show," ran for 30 years, until 1982, and continues today in reruns. Welk stopped performing in 1989.

Welk, who accompanied his orchestra on the accordion and waltzed with his Champagne Lady singer, never wavered from the bouncing, effervescent dance music he began playing as a young man in his native North Dakota.

To many, his wholesome formula was hopelessly square. But it worked. Swing, rock 'n' roll, bebop, progressive and other pop genres came and went, but Welk held his status among mostly older fans.

"We try to please our audience," he said in 1964. "We try to bring it some joy, happiness and relaxation and always to be in good taste — the kind of entertainment that should come into the home."

His "Champagne Music," and the phrases "Ah-one, an' ah-two" and "wunnerful, wunnerful" in his German accent became part of the nation's lexicon. The show's theme song for half its run was "Bubbles in the Wine."

The sunny orchestra leader toured the country for 25 years before hitting it big with a TV appearance in Los Angeles in 1951. After two years of high ratings there, the show was picked up by ABC.

"The Lawrence Welk Show" ran on ABC for 16 years, ending in 1971. After that, it was syndicated on 248 stations in the United States and Canada until 1982 — 1,542 performances in all.

Welk assembled a stable of mostly unknown but always wholesome family" who were with him from the first TV season to the last included saxophonist Dick Dale, accordionist Myron Floren and singer Jim Roberts.

Among the most popular shows were the Christmas specials during which musicians, singers and dancers brought their families on stage for caroling and gifts.



MAY 18, 1992

ELIZABETH LENNOX

Elizabeth Lennox, 98, an early radio singer, died May 3 in Southport, Conn., of a heart seizure.

She began broadcasting in 1925 on programs sponsored by Brunswick Records, for whom she recorded in the early 1920s. She then signed with the new Columbia network to appear regularly from New York as one of four staff singers.

A contralto soloist, she sang opera and oratorio works, as well as traditional and popular songs, with CBS house conductors Don Voorhees, Howard Barlow and Red Nichols.

By 1930 Lennox was a featured performer with NBC's Lucky Strike Dance Orchestra, led by B.A. Rolfe. She also appeared on the "Palmolive Hour" with tenor Frank Munn. The duo sang together often on the Frank Hummert series "American Album of Familiar Music." Lennox also co-starred with Everett Marshall and Oscar Shaw on CBS' "Broadway Varieties" from 1934 to 1937.

Born in Ionia, Mich., she studied at the Cosmopolitan School of Music in Chicago, where she made her recital debut in 1916. Lennox came to New York during World War I and became a soloist at several Manhattan churches.

Record company executives approached her, and Thomas A. Edison approved her voice for his Edison label in 1919. Lennox also sang in concerts with the New York Philharmonic, the Chicago Symphony and the Detroit Symphony.

Lennox retired from singing in 1942. She later helped organize the Bridgeport Symphony and its summer pops concerts, acting as program director for 17 years. Lennox brought top artists like Marian Anderson, Paul Whiteman, Oscar Levant and Hildegarde to perform in Connecticut. She also worked for the South Shore Music Club in Fairfield, Conn., where she gave young performers exposure.

She helped start the Westport School of Music and served as a trustee for more than 35 years. She had been on the board of associate trustees at the Manhattan School of Music and on the advisory committee of Opera New England.

In 1976 Gov. Ella Grasso named her one of the 100 Outstanding Women of Connecticut. On her 95th birthday, NBC president Robert C. Wright recognized her as a broadcast pioneer. And the Elizabeth Lennox Hughes Scholarship Fund was established in her honor at the Westport School of Music.

The widow of printing firm executive George P. Hughes, Lennox lived in the Westport area for 65 years.

Survived by a son, David, a professor of music at Harvard University, and two granddaughters.



Variety obituary furnished by its author, Tom DeLong. Photo is from Connecticut's Fairpress, and appeared in an article about Miss Lennox just a week before her death.

PHONOGRAPH FORUM

by George Paul

SCIENCE AND THE TALKING MACHINE

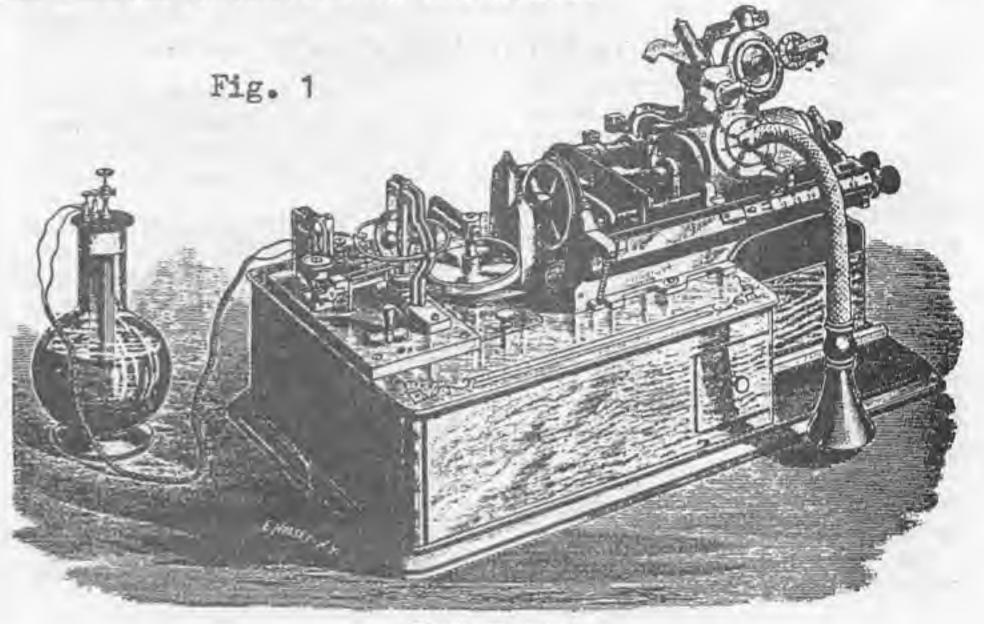
For those of us hopelessly immersed in our love of early phonographs and recordings, the thought of early scientific study through the use of these devices may present an incongruity. Do we not regard these machines in terms of entertainment, artistry, and occasional business application? We each harbor our own vintage daydreams of a time long ago which these artifacts re-create and preserve for us. We fixate upon the revolving governor weights of an Edison Class M, the graceful and colorful floral decoration of early Graphophones, the inane touting of 'possum and chicken from the throat of Arthur Collins, or the voice of young Caruso. Our vision of these halcyon days does not likely include efforts to harness the talking machine's technology for the benefit of science. On the other hand, if you were struck by the phrase "talking machine technology," what follows could prove entertaining after all.

"Science" is a general term, meaningless in itself, which implies systemized knowledge of some sort. No scientific overview, however brief, should ignore the contributions made in the fields of Anthopology and Language by early phonographic researchers. As early as 1890, the vanishing language and folk songs of Passamaquoddy Indians were recorded on cylinders by Jesse Walter Fewkes. Along the same lines, Dr. Francis Densmore captured on cylinders the verbal history and language of Native Americans whose nation had been taken away from them a scant 20-30 years before. It is not this type of pioneering scientific use of talking machines upon which we will focus. (Through the passage of time, all recordings of this early era will be considered Anthrpologically valuable!) Rather, we will briefly examine the early study of sound - Acoustics through the use of the technical marvel of the age: the talking machine.

Since the physical properties of sound itself made possible the talking machine's existence, it was only logical that the phonograph should be used to further study and define sound. Within this realm two fields of study became apparent: Environmental Acoustics and Voice.

The Tinfoil Phonograph, despite its claims of scientific application, was too crude an instrument to contribute standardized measurement data related to sound. In 1878, an apparatus based on the tinfoil phonograph was constructed and demonstrated by Jenkins and Ewing of the Royal Society of Edinburgh. It was apparently quite complex and too delicate for general use by scientific investigators. The tinfoil phonograph's forte was imitation of bird calls, cornet solos, and loud speech. But within the embossed metal grooves of its recordings lay the promise of what was possible. Audiences marveled at the increase in pitch resulting from more rapid rotation of the crank. The primary relationship between vibrations per second and pitch was made demonstrable through the tinfoil phonograph. Although probably never attempted, it was now possible to synchronize a phonograph and a phonautograph to obtain both an auditory and visual representation of the same sound on a single cylinder. Such exciting scientific applications were not only limited by the current crude technology, but overshadowed by the lines of grinning spectators anxious to hear a machine bray like an ass or sing like a bird!

One of the most famous acoustic scientists of the time was Alexander Graham Bell. Together with Chichester Bell and Charles Sumner Tainter, a significant amount of acoustic research was accomplished under the auspices of The Volta Laboratory in Washington, D.C. Subsequently, during the early 1880's, The Volta Laboratory was the center of phonographic development. Through the application of ingenious scientific principles using light rays, compressed air, and experimental chemical compositions, recording and playback technology was significantly advanced. This injection of scientific effort yielded a proportionate availability of scientific application of the talking machine. The devices, now using precision styli and more sensitive wax recording surfaces, began providing modest experimental potential in Acoustics.



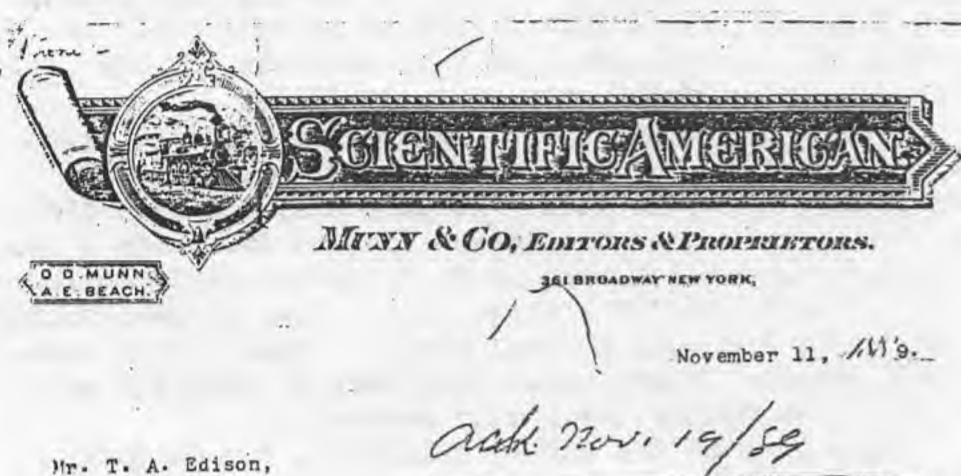
THE PHONOGRAPH.

Thomas Edison, re-entering the fray, contributed important phonographic design elements and cylinder standardization which would ultimately be adopted by the industry and survive for over forty years. In the June, 1888 issue of The North American Review, Edison wrote a description of his Perfected Phonograph (Fig. 1) and alluded to its scientific potential:

Since the time of Lucretius, the movement of atoms have been invested with an intense interest for philosophers and scientific students, and the wave motions of light, heat, and sound have engaged, with a constantly increasing degree of importance, the attention of modern investigators. When we consider the relation of these motions to mathematics and to music, the conception of Pythagoras that number and harmony constituted the principle of the Universe, does not seem to be very far out of the way. In the Phonograph we find an illustration of the truth that human speech is governed by the laws of number, harmony and rhythm. And by means of these laws, we are now able to register all sorts of sounds and all articulate utterance - even to the lightest shades and variations of the voice - in lines or dots which are an absolute equivalent for the emission of sound by the lips; so that, through this contrivance, we can cause these lines and dots to give forth again the sound of the voice, of music, and all other sounds recorded by them, whether audible or inauduble. For it is a very extraordinary fact that, while the deepest tone that our ears are capable of recognizing is one containing 16 vibrations a second, the phonograph will record 10 vibrations or less, and can then raise the pitch until we hear a reproduction from them. Similarly, vibrations

above the highest rate audible to the ear can be recorded on the phonograph and then reproduced by lowering the pitch, until we actually hear the record of those inaudible pulsations.

The new-found adaptability of phonographic apparatus to scientific study manifested itself in requests from amateur and professional researchers for phonographs. On November 11, 1889, George Hopkins of The Scientific American wrote to Edison requesting a phonograph for use in his experiments (Fig. 2). As can be seen, Edison's response to his phonograph's scientific application was affable; possibly to the point of circumventing his contract with Jesse Lippincott, depending upon one's interpretation of Edison's last sentence!



My dear Sir;

I am carrying forward some experiments in Sound. I

could use a phonograph to great advantage but do not care to rent one if I can help it. Could you not on some terms let me have one of the kind you are now replacing with the simplified form?

I would not need the motor as I have a small caloric engine that would drive it perfectly.

My experiments relate to the velocity of sound.

Yours truly,

Come over any time & get inch what you want per English what you want of I've fundant of plines when well fix fundant owing to my contined of a min may

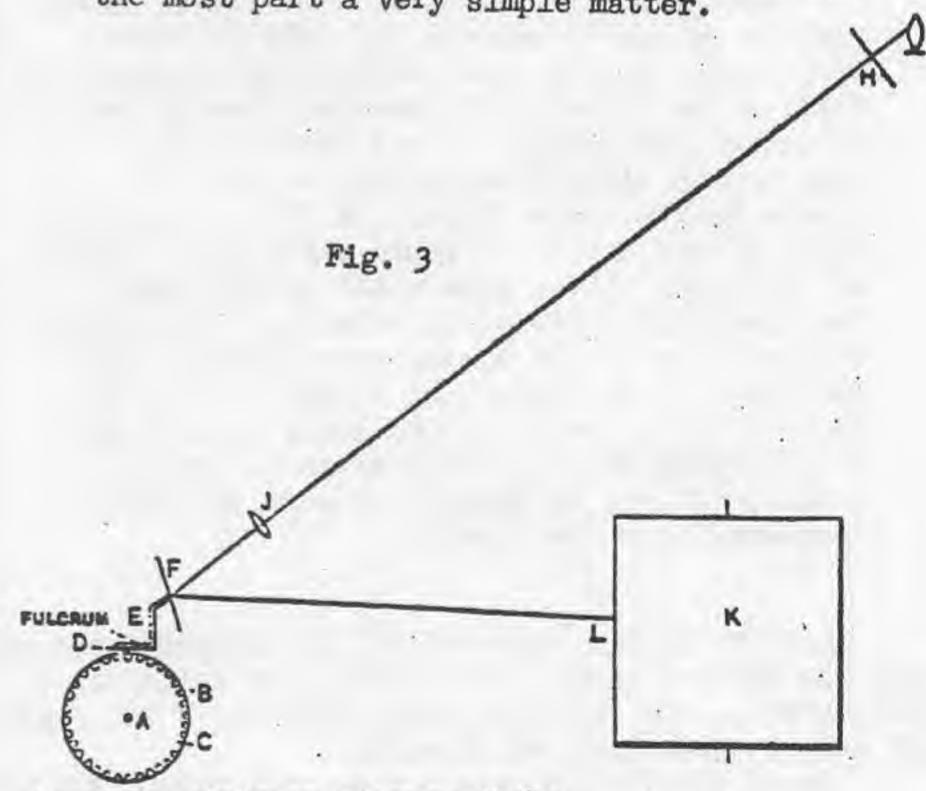
Fig. 2 (Courtesy Edison National Historic Site) (Edison's penciled reply reads: "Come over anytime & get what you want. Mr. English at phonowks will fit you out. Owing to my contract I can only loan the stuff. E")

It wasn't long before the talking machine was seen not only as a tool for research, but as a medium for bequeathing the fruits of scientific study to a waiting public. Almost defying belief is the attempts in the early 1890's by the Columbia Phonograph Co. to market cylinder records which banged, clanged, and rang in order to "cure deafness" by jarring loose the small bones in the middle ear. While presumably based upon scientific principles, this effort to dispense therapy via the phonograph remains laughable quackery which would have been completely harmless had not Columbia charged \$5.00 apiece for the records!

Evidently, the talking machine was envisioned during the 1890's as a device with practically unlimited diagnostic value. As early as 1878 it was claimed to reproduce the sounds of various ailments "...so believably that physicians in the audience would instinctively begin to write prescriptions." Indeed, the improvements in talking machines over the next 20 years would yield some limited practical use as a diagnostic tool. The April, 1897 issue of The Phonoscope stated that Dr. Julius Mount Bleyer of New York had amassed a collection of records which included 600 records of coughs! While similar activity on a more modest scale presumably occurred elsewhere during the 1890's, one wonders the extent to which such "information" was put to practical use.

In the April, 1900 issue of <u>The Physical Review</u> there appeared an article by Louis Bevier, Jr. titled: "The Acoustic Analysis of the Vowels From The Phonographic Record." The apparatus used by Bevier is illustrated in Fig. 3 and described by him as follows:

We took an Edison Automatic Reproducer, such as is regularly sold with the machines, removed the diaphragm, and fastened to the tracing lever a rigid arm bearing an adjustable plane mirror. A spring, fastened to this arm, holds the sapphire knob of the reproducer lightly but firmly in the furrow of the wax. It should be just stiff enough to raise the weight of the moveable plate, on which the lever is mounted, and press the whole snugly up against the carriage frame, in order that not the smallest movement of the knob can be taken up at bearings, but that every movement, small or great, shall be faithfully imparted to the mirror. Then a narrow beam of light reflected from the mirror and focused on moving bromide paper will leave a sinuous trace exactly corresponding to the profile of the bottom of the furrow in the wax. The magnifying power of this arrangement is very great, because the long arm of the lever is a beam of light, and making this arm longer is for the most part a very simple matter.



.1 - section of phonograph wax cylinder.

B - surface of the wax.

C = bottom of the furrow, with undulations much exaggerated.

D = sapphire knob of tracer.

E = rigid lever bearing adjustable mirror.

F = adjustable plane mirror.

G = source of light.
II = plate with pin hole through which light passes.

\[
\int = \text{convex lens with conjugate focial Hand \(\L. \)
\[
\int = \text{revolving drum carrying bromide paper.}
\]

L = surface of paper on which point of light leaves the sinuous trace.

(cont. next page)

Since Revier was analyzing tracings made from playing a phonograph record using a slightly modified phonograph, and could adjust the phonograph to magnify the tracings 5000 times, the scientific practicality of the talking machine and its principles was amply demonstrated. Bevier wrote a series of articles in The Physical Review for a period of at least five years, making a significant contribution to the development of Voice Science, a part of modern-day Speech Pathology. These articles dealt with graphic analysis of spoken vowels such as: "The Vowel A (as in raw), O (as in rode), U (as in rude)" obtained through the use of the phonographic apparatus described. Today, similar diagnostic work is done using a device called a Sound Spectograph.

But our period ends here, at the turn of the century, with Berliner Gramophones tooting Sousa marches, Uncle Josh laughing from the brass horns of Zonophones, and Billy Golden shouting from brown wax cylinders on Phonographs and Graphophones. Nickels drop into curved-glass topped cabinets. Melba sings tonight. And somewhere, to our eventual benefit, a scientist

will wind up a talking machine.

The Edison Blue "Damberol" Cylinder Records

by L. Brevoort Odell

Editor's note: It is our pleasure to present an article written by L. Brevoort Odell who, at the age of 85, is one of the few collectors around who can honestly claim to be "for over 75 years a cylinder record enthusiast"! Mr. Odell's recollections are fascinating, and we can't resist quoting the following, even though it is not directly related to his article:

"Dardanella" brings back rather funny memories to me, as it was all the rage in 1919-1920 when I worked after school and on Saturday for the Columbia Graphophone Company in my native Pittsburgh. I was thirteen years of age, and my widowed mother was one of the clerks in the large store. In those forgotten days, no one bought a record without listening to it first. There were eight booths where the customers listened to records. For weeks, at least two of the booths were playing "Dardanella," so my mother and I were nearly "Dardanella'd" to death. I was stock boy and had to file back in place records that were not bought. It was my delight to wait on trade whenever I got the chance.

In 1915, Edison recorded all his cylinder records from his Diamond Discs, thus making the cylinders a re-recording, and lowering their standing. The British called them "Damberol Records."

Almost all the cylinders made from #2500, #28203, and #29005 were in this category, with few that were direct recordings, and those few were made from "wax" Amberol masters. Late foreign series were dubbed also.

Yes, many collecors look down on the re-recorded cylinders. But let us take a second look at these records. A direct recording is much to be desired, yet, is the difference so great? Yes, there is a different timbre, but are we downgrading a very remarkable product?

Today, almost ALL records and tapes are re-recordings. We accept them without even thinking about the process.

Here are cylinder records made by Edison who was many years beyond his time. These were the first successful re-recordings which were so nearly exactly like the original discs that some sounded better than the original, for the Diamond Discs had a loud surface noise whereas the cylinders were nearly silent surfaced! And Edison used ALL acoustic, horn to horn, methods! Perhaps, then, we should consider all Blue Amberol Records as a master's product, direct recordings, and those which were dubbed.

I believe Pathé re-recorded at least some of their cylinders and hill and dale discs from an over-sized cylinder. Someone may be able to clarify this point. The Pathé cylinders that I have in my collection are not to be compared with the Blue Amberols for ton . I do not collect Pathé hill and dale discs.

It is not a dislike of Pathé hill and dale discs that stopped me from collecting them, but the walls could only bulge so far. The only hill and dale discs I have kept besides the Edison Diamond Discs are a few "Lyric" discs which were in my father-in-law's collection. These are 10" records with a fine groove, played like Pathé but with a steel needle. They have a beautiful label. I have never seen more of them for sale. I admire Pathé for their many endeavors.

Speaking of the dubbed cylinders, for example, play #3312 "Sing, Sing, Birds on the Wing," sung by Master Claude Isaacs, boy soprano. No loss of quality can be found in this very fine rendering. Many others are just as good, but this one will give a first rate example.

Jack Caidin, the well known New York dealer in all kinds of records, once said to me, "Never give up your cylinder records. When disc records are selling at 'a dime a dozen,' the cylinders will be worth their weight in gold."

How true.

* * * * *

Readers wishing to correspond with Mr. Odell may do so by addressing him through the GRAPHIC.



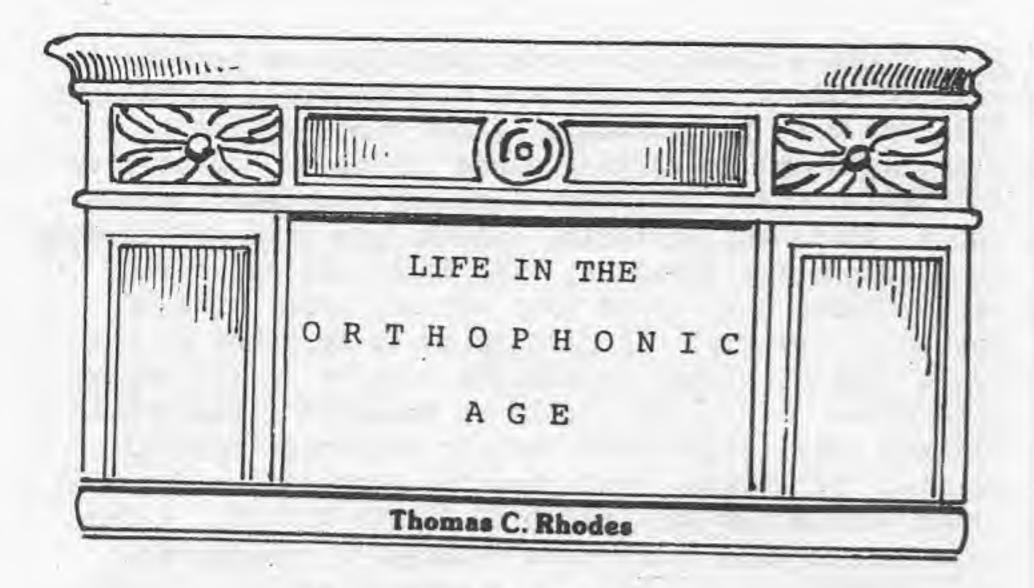
Mr. Odell on Easter Sunday. Perhaps the strains of "Damberol" #2846, "Ye Happy Bells of Easter Day," are coming from the cygnet horn in the background!



THOMAS A. EDISON, INC. ORANGE, N. J.



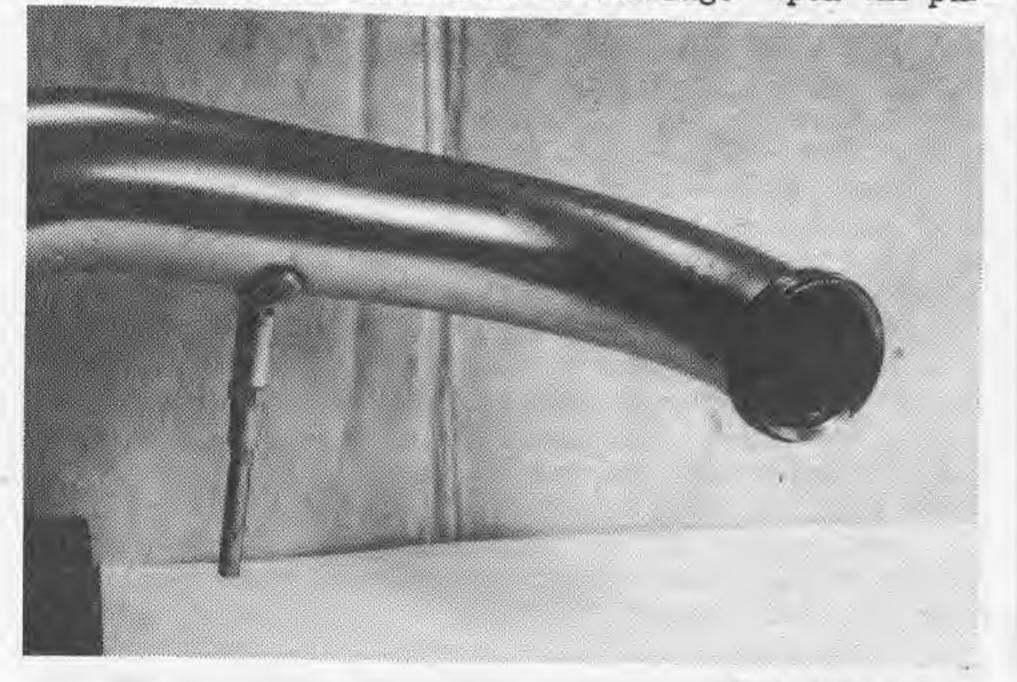
"A Product of the Edison Laboratories"



ABOUT TONE AND TONE ARMS

Part II

This concluding column will deal with the 'hands on' steps to make one's tone arm an airtight and smoothly working connector between a restored sound-box and sealed tone chamber. It is always best to work back from the diaphragm towards the horn when restoring any Victrola, especially the Orthophonic models. Too many are tempted to fix this and that, hoping that such random efforts will result in good sound. While method might appear boring next to inspired slap-dash, in the end method always wins. It will save labor in the long-run, as a thorough job done once is worth ten sessions of reworking. Upon the pur-



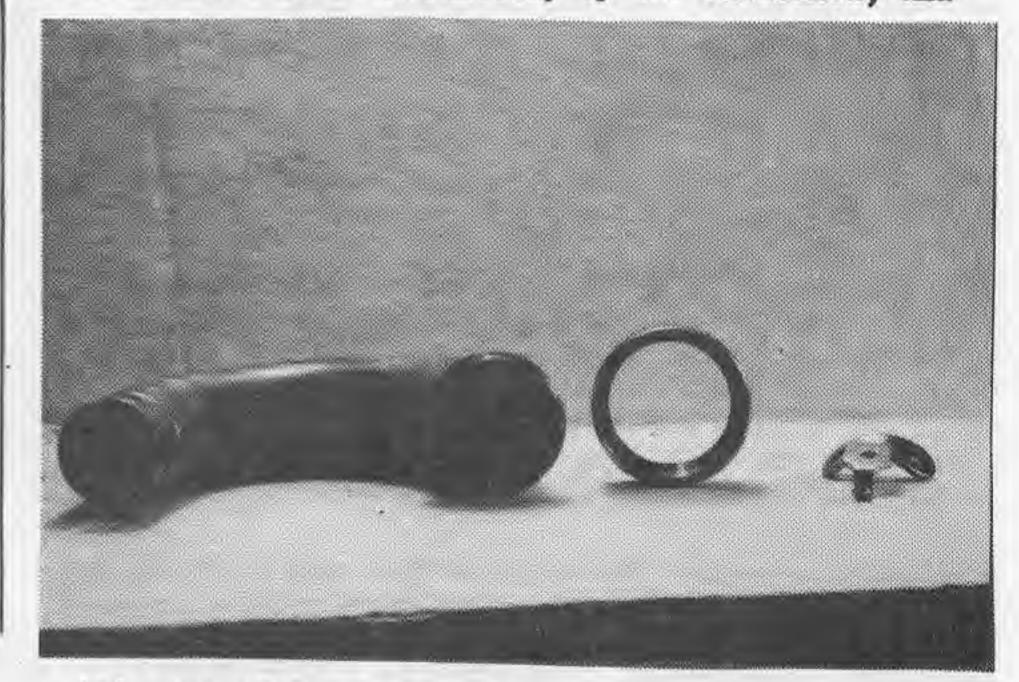
The arm ...

a whirl." Unfortunately for them, it is winter and the machine had spent years in an unheated room or shed. The sudden jar of a loud rusty needle trying to move a frozen needle arm bearing turns a small fissure into an arm-breaking crack. Silence and a despairing mood replace the screechy wail of but a few seconds ago.

All of these problems could have been avoided if the owner had recalled just a few simple facts. One, any mechanism no matter how well built will tend to 'seize up' over time. This can be caused by several things, chiefly metal expansion and lubrication that has very much hardened. Cirt and metal corrosion or rust are others. Just as the thinking driver would never race his car engine in cold weather just after starting, the wise collector should be in no hurry to give his or her unrestored Victrola "a whirl." To expect mechanical parts simply to work flawlessly after several years or decades of disuse is nothing short of folly. Unhappily we presently live in the "instant" age. Patience is a forgotten art.

Two, even if parts are not rusty or damaged, they may still be grossly out of adjustment. Governors, brakes, motor gears and the rest <u>must</u> be thoroughly checked for the right alignment and meshing.

It will be taken for granted that the reader who would choose to work on an Orthophonic or older style Victrola would also have some very basic knowledge of tools and experience with small mechanical parts. Owners without such a background would do well to refrain. Nothing is to be gained by feigning repair talents one does not possess. As stated before, NO part is to be sacrificed needlessly by the unskilled, and



And some of its components

chase of one's newest 'find' there is always the urge to "get it going." This is natural and wholly understandable. It would be a sorry state of affairs if one could blandly consign a new Orthophonic treasure to the basement or spare room with an intention of "getting to it someday." However, enthusiasm uninformed by reason and method could wreak havoc on a rare instrument. Consider the following. CASE A: On a lucky happenstance, one has bought an Orthophonic which has never been resold and may have come from the first owner or their relations. On the end of the tone arm rests the ORIGINAL soundbox. How rare indeed! With the good intention of restoration one firmly grasps the box and twists it off the arm. Only it doesn't come loose; the headshell turns by itself, breaking the needle arm prongs and ripping the diaphragm. In a heartbeat a rare part has been almost totally destroyed.

CASE B: Getting one's latest Victor treasure into the spare room, all there urge the lucky owner to "give it

NO PROCEDURE is worth ruining a Victrola part. Also, some of these procedures do not apply to owners of the Ten Fifty family of automatic instruments. Given the complexity of THAT mechanism, heedless tinkering would be criminal! Thirdly, it is a starting premise that the reader considering this tone arm 'tune up' already owns good quality miniature tools, such as those by Craftsman or Stanley. Large or 'mongrel' tools only damage parts and stress fittings. Needle files for flashing and corrosion removal should be on hand, along with extra fine steel wool, machine oil, clean rags and cotton swabs. A flashlight or utility lamp will be most usefyl.

CAUTION: The purpose of all work recommended will be simply to correct the ravages of time and neglect. We are not out to 'remake' the parts. DO NOT over-clean, over-rub or file away a crucial radius.

ANOTHER CAUTION: The steps illustrated soon apply only to the standard acoustic taper tubes. Owners of more

exotic machines such as the Borgia II, the Eight Sixty, the Nine Forty cannot follow these simple steps as those units have the special combination tone arms fitted with the magnetic pickups. These arms also have special brackets and other fittings not found on standard arms. Unless the owners of such units are well versed in the demounting of these special fitments and the need to disconnect lead downs and the rest, no work should be attempted. Owners of Ten Fifties might apply the crook arm steps to their machines but after that, these simple do-it-yourself remedies have NO application WHATEVER.

Step One - Demount the Orthophonic soundbox. The box must be twisted towards the front of the machine. If any significant resistance or binding is present, DO NOT FORCE THE SOUNDBOX. One may apply penetrant drops or spray in several applications, allowing overnight soaking-in. If box still offers resistance or seems 'frozen' to tone arm, STOP. Refer to qualified expert in restoration. Never risk damage to any Victrola part. When taking off the soundbox, use a gentle, steady movement. Go slowly: there are NO rewards for speed but many penalties for haste! Store box in safe container.

Step Two - Take entire tone arm, pivot and pivot support off the machine by undoing the four mounting screws on the soutside shelf of the base. Use penetrant if needed. These screws will be either wood or machine types, depending on the unit. Less costly machines used the wood screws, while the medium and high priced models used the machine screws and inserts. Do not mix types, for obvious reasons. Store screws properly. Taking the tone arm off of the rear motor-board surround makes it easier to inspect and correct the taper tube itself. (Note: On some very early production, one may find wood screws instead of machine type. Changes were made during this early stage of manufacture, so variations ill be found.)

Step Three - Turning the tone arm so the back curve may be seen, one will notice the rest bracket. It is usually held by two machine screws, the third screw being a stop screw for the ring. Be sure that all small screws are safely stored. Removing the bracket will allow the join ring to unscrew all the way, allowing the crook to be uncoupled.

Step Four - Unscrew the joining ring and separate the crook from the taper tube. Penetrant usually is not needed unless there is binding. If binding is felt throughout unscrewing, then ring is either dented or was not screwed on properly, crossing the threads. Check for thread damage.

Step Five - This stop pin must be taken out to allow the join ring to slide off the crook arm. This is customarily the toughest pin to unscrew and may need overnight soaking with penetrant. In addition, one may have to clean and file the tip of this pin inside the crook to free it. Take care with this pin as it is not a standard machine part by any means.

Step Six - It is important to remove and check this trip post, as some are bent and some are set too long, scraping the motorboard. The nut piece is used to shorten the end post, but all final settings must be made with the trip engaged in between the brake guide arms.

Step Seven - Apply penetrant and loosen set screw of pivot pin. Examine both. If pin is bent, straighten in vise carefully or replace. Clean pin well on taper tube top, checking for corrosion as well. Nickled arms have much less problems than the gold plated ones.

Step Eight - Clean all parts thoroughly in penetrant oil, or mild solvent. Beware of commercial degreasers that may harm the plating. After cleaning, using flashlight and magnifying glass if needed, scrutinize all parts. Look for corrosion, dirt hardened grease spots, dents and so forth. Check join ring and threading. Clean all threading with light oil amd cotton swabs, being careful to pick off any stray bits of cotton afterwards. If pitting is to be found on any bevel radius, either inside the ring or on the taper tube screw flange, it should be smoothed either with oil and extra fine steel wool or extremely careful filing. If filing, just give the corrosion a few well aimed passes: DO NOT DAMAGE OR CHANGE RADIUS. A damaged radius will cause more leakage or binding than six decades of neglect! If unsure of method, please leave things alone.

Step Nine - If one wishes to do a 'trial assemble' make sure all parts are dry and all residue wiped using a soft clean rag. Save to wipe off dried grease and gunk, never use paper towels, as fibres can get lodged inside parts, causing chafing or binding. Once trial assembled, check for the smooth working of all moving parts, especially the crook arm. Further cleaning or Oil buffing may be called for. One should be able to screw the ring fairly firmly and yet still enjoy smooth up and down crook motion, WITHOUT WOBBLE. Parts should be so cleaned, buffed and trued that grease should hardly be necessary. Never use lubricant as a crutch for sloppy work. Always take the time to do a thorough job.

Step Ten - One may now put everything together permanently using a high grade bearing grease as a lubricant and sealer. Do not skimp on grease, especially for sealing. Even the machine screws should be given a dab of grease before mounting the fittings. Be most liberal with grease for the join rings; screwing it onto the taper tube will squeeze out any excess and leave an airtight seal. Do not use glue as a sealer for little crews. It is a bad practice to do anything to a part which cannot be reversed. Never paint the inside throat of your soundbox for a tight fit: in the summer the paint will swell and make getting the soundbox off the crook arm next to impossible. For the pivot pin, use medium body machine oil. Same with its tiny set screw. If the pin slides into the pivot hole too loosely, a tiny bit of transparent tape should cure any such leeway.

Step Eleven - Put a heavy coating of grease around the inside of the pivot support, concentrating the most at the bearing. Be generous but not sloppy. If the round felt washer is loose, reglue the base on insert tube using "Duco" or contact cement. Make sure the washer is shaped to go around the bottom of the tube neatly.

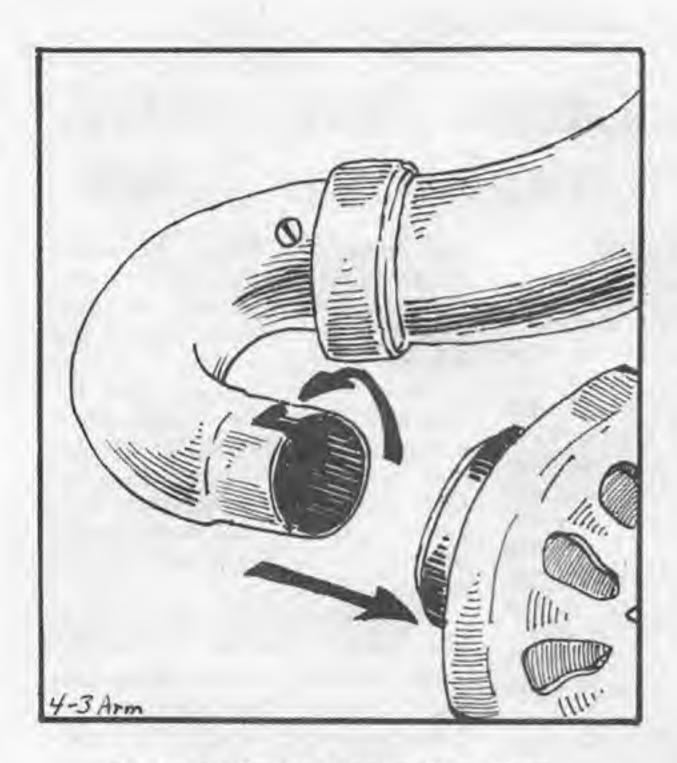
Step Twelve - Remount tone arm assembly, working plenty of grease around the insert tube and the shelf of the insert opening. Don't spare the grease. A light coat of grease will protect the four mounting screws. One is aiming for airtightness to the highest degree possible. Screw the mounting screws in order, starting with the rear left one. Use plenty of strength for a tight fit but resist "going overboard." Never use power drivers for this task. Replace soundbox, using heavy semi-solid grease, applied carefully to inside of throat. Too much will block sound. Wipe away excess and apply a handmade sealer ring from auto gasket putty. This will not only perfect the seal but prevent soundbox wobble, as well as cutting to the minimum any headshell resonance reaching the

crook arm. One can now enjoy an airtight passage from diaphragm to grill cloth!

To contact Mr. Rhodes, write him at 26 Austin Ave., Apt. #106, Greenville, RI 02828.

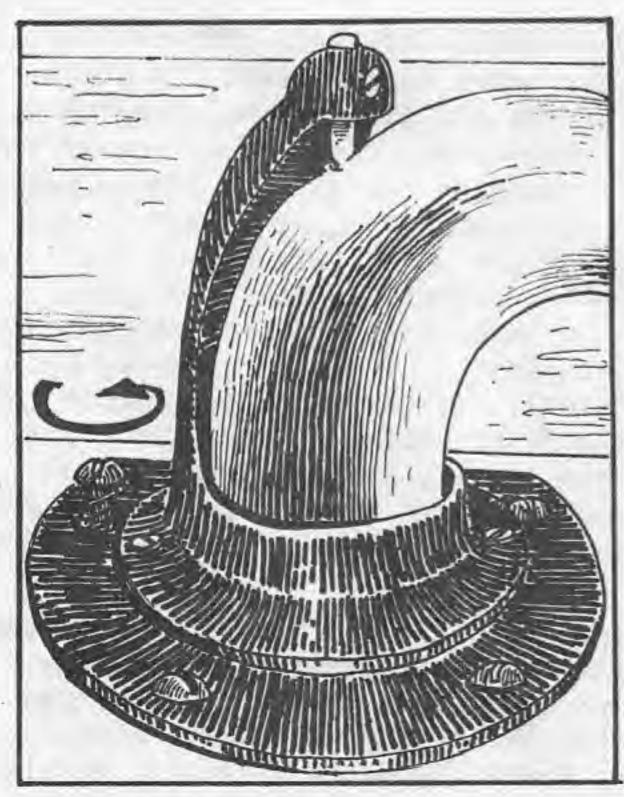
Points to Consider

A step-by-step look at Orthophonic tone arm rejuvenation. Illustrations by Thomas C. Rhodes (read down).

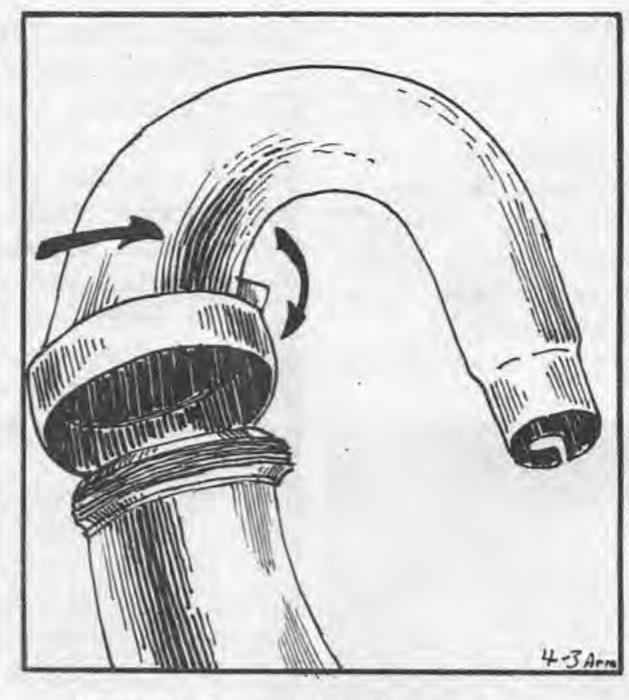


Demount Orthophonic Soundbox

Care must be taken that soundbox is not frozen onto crook arm. Do NOT force box or use torque wrench. Any wrongly applied force may ruin box.

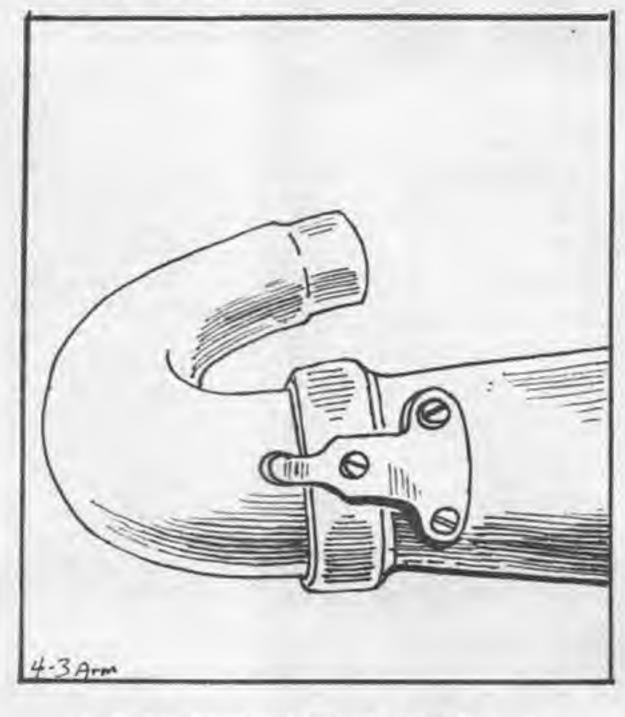


Loosen And Remove Mounting Screws



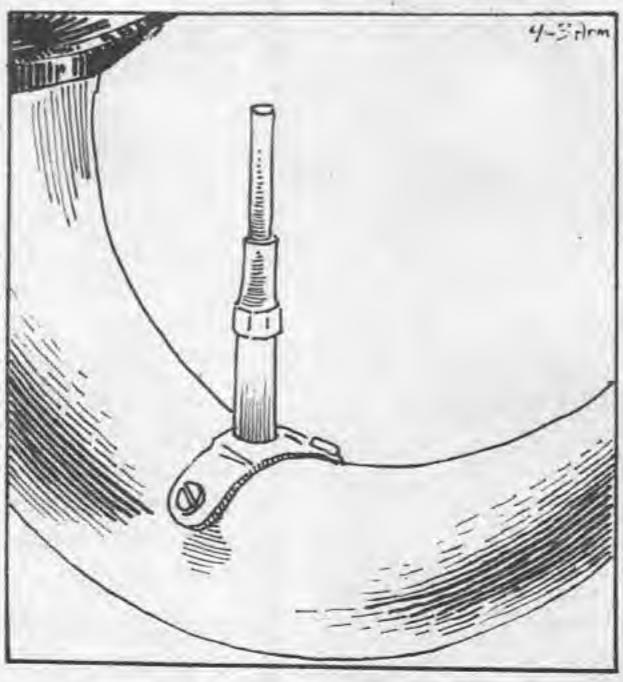
Unscrew Crook From Taper Tube

Turn retaining ring to right to remove crook arm when tone arm is in this position. Unscrew gently, using penetrant drops or spray if binding is encountered.



Remove Bracket Rest and Screws

Care should be taken not to force any of these small machine screws. Use a few drops of penetrant first. Repeat and allow to soak in. Never force them.



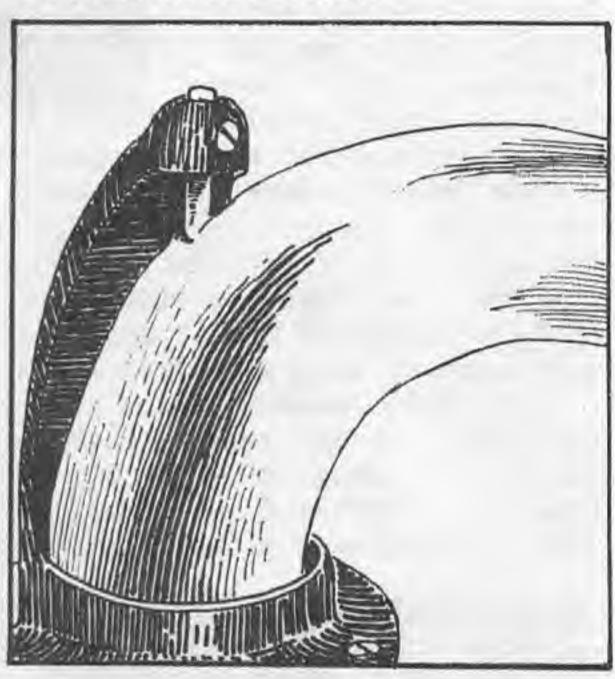
Unscrew Trip Post From Tube

Care should be taken to use penetrant drops if needed. Never force small such tiny machine screws as thread damage comes easy. Store all small parts and fittings in glass jar or other sturdy holder. Use only proper small tools.



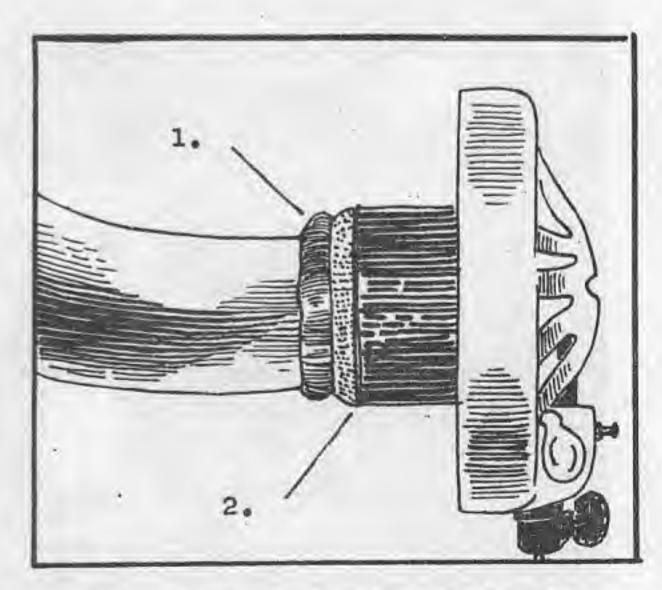
Unscrew Stop Pin From Crook

Using penetrant drops if needed, unscrew stop pin carefully. The screw ring may now be slid over the crook, removing it completely.



Check Pivot And Centering Pin

If pivot is sound and pin snugly fit and stable, one is quite lucky. It is still good practice to apply penetrant drops or spray, unscrew set pin to take out pivot pin. Examine for corrosion on pin and pivot well on taper tube. Also, is pivot pin straight? Check closely. Scrutinize for cracks and fissures in pivot top as well. Replace if needed.



Properly Sealed Orthophonic Box

- 1. Additional seal from homemade putty gasket (auto type), pressed up against arm grommet.
- 2. Arm grommet edge sealed with glue to prevent even tiniest internal leak.

A Tribute to Lew Green =Last of the Green Brothers=

We were unaware that our subscriber Lewis G. Green was the son of Lew Green of the famous Green Brothers, and further unaware that his father was still living... until Lew, Jr. sent us his dad's obituary. We'd like to make amends for this oversight by sharing some rare photographs and information about this remarkable threesome; we just regret that we didn't do this while

Lew, Sr. was still living.

Lew's brothers Joe and George were well established phonograph artists by the time he joined the group in 1927. Lew was a guitarist and can be heard on some of the band's recordings, as well as on some led by Ferde Grofé (Columbia, 1933), Ruby Newman (Victor, 1937) and Vincent Lopez (Bluebird, early 1939). There are undoubtedly other recordings on which Lew plays

which have not yet been documented.

The brothers were all talented composers as well as musicians. Among others, George wrote "Watermelon Whispers" and "Fluffy Ruffles." Joe wrote "Dawn of Tomorrow" and "Dance of the Toy Regiment." Lew penned "It's a Wonderful World" and "High Hat Hattie." There were several hundred additional songs among the three.

When radio mushroomed in the early 1930s the Greens had plenty of employment, both in the broadcasting studios and in studios making 16" radio transcriptions. However, a little known aspect of their careers was their involvement with animated films. The first three



Above: Lew Green with Ferde Grofe and the first electric guitar. Lew was also the manager and featured guitarist of the Grofe Orchestra in New York.

Disney films ("Steamboat Willie," "The Opry House" and "Skeleton Dance") all used music of the Green Brothers. The trio was bolstered by Frank Banta (piano), Bill Dorn (marimba), Tom Moore (sax), Keith Pitman (bass sax) and Ben Posner (violin). In 1929 Lew joined the Fleischer studio learning animation, and he worked on Ko-Ko the Clown. He also did the cartoon "Mike Sketches," which was syndicated until 1935.

In 1936 Lew Green and George Van Eps toured American cities for the Epiphone Company introducing the first electric guitars, both steel and standard. (Lew, Jr. adds, "...and American music became screwed up for ever-

more"!)

For further information, see Mr. Green's obituary; and check out the personnel in those wonderful pictures of the orchestra. Finally, no more fitting tribute to the Green Brothers could be made than if our readers spent an evening listening to a selection of the many fine recordings made by these pioneering instrumentalists.

CHICAGO SUN-TIMES, SUNDAY, JUNE 21, 1992

Lewis G. Green, Songwriter, Cinematographer for Bears

By Gary Wisby Staff Writer

Lewis G. Green, 82, a musician, songwriter, advertising executive and pioneer radio and TV producer, died June 14 at the Maple Hill Nursing Center in Long Grove.

The Arlington Heights resident was "one of those guys that did everything," said his son Lewis Jr.

In the late 1920s, Mr. Green played guitar with his xylophonist brothers, Joe and George, in the Green Brothers Novelty Band, recording for the Edison Co. From the 1930s on, he composed more than 300 songs.

Also in the '30s, Mr. Green was accompanist for Kate Smith, appearing with her in the movie "The Big Broadcast of 1932." As featured guitarist for orchestra leader Ferde Grofe, he was one of the first to introduce audiences to the electric guitar.

Mr. Green moved to Chicago in 1942 to produce and direct the "Don McNeil Breakfast Club" radio show, for which he wrote many songs. Later, with Reincke, Meyer & Finn and other ad agencies, he composed many radio and TV advertising jingles.

As a cinematographer for the Chicago Bears, he filmed game action for later viewing by coaches and players. He became one of the first producers of televised NFL games, including the home games of the Chicago Bears and Chicago Cardinals.

Mr. Green was past president of the Chicago chapter of the National Academy of Recording Arts and Sciences, which presents the Grammy awards, and of the Western Advertising Golfers Association.

Survivors include his wife, Elsie; another son, Joseph; a sister, Marion, three grandchildren and two great-grandchildren.

Services were Friday at the Glueckert Funeral Home, Arlington Heights, with burial in Memory Gardens Cemetery, Arlington Heights.

The Green Brothers' Novelty Orchestra (see right)

TOP: This picture was taken in the first CBS Studio which was located in the old Steinway Building in New York, 1929. The orchestra was featured on one of the first commercial programs on the air for Temple Radios. The Green Brothers are George Hamilton Green (fifth from left, front row), Joe Green (sixth from left), and Lew Green (next to Joe, directly behind microphone. Also seen are William Dorn (former Edison soloist) at far left, Joe Raymond next to Dorn, then Murray Kellner (also an Edison artist). In the back row, fourth from left, is the pianist Frank Banta. At the far right, front row next to the chimes, is band manager Fred Hager (recording pioneer whose career as a violin soloist and band leader went back to before the turn of the century).

BOTTOM: In an unidentified 1930-31 New York recording studio. Left to right: Lou Raderman (violin), Lew Green (guitar), George H. Green (xylophone), George Marsh (drums), Cookie Hanaford (saxophone), Jimmy Dorsey (saxophone), Norman McPhearson (tuba), Morris Pierce (saxophone), Joe Breviano (accordian), Bill Dorn (xylophone), Joe Green (xylophone) and Frank Banta (piano).





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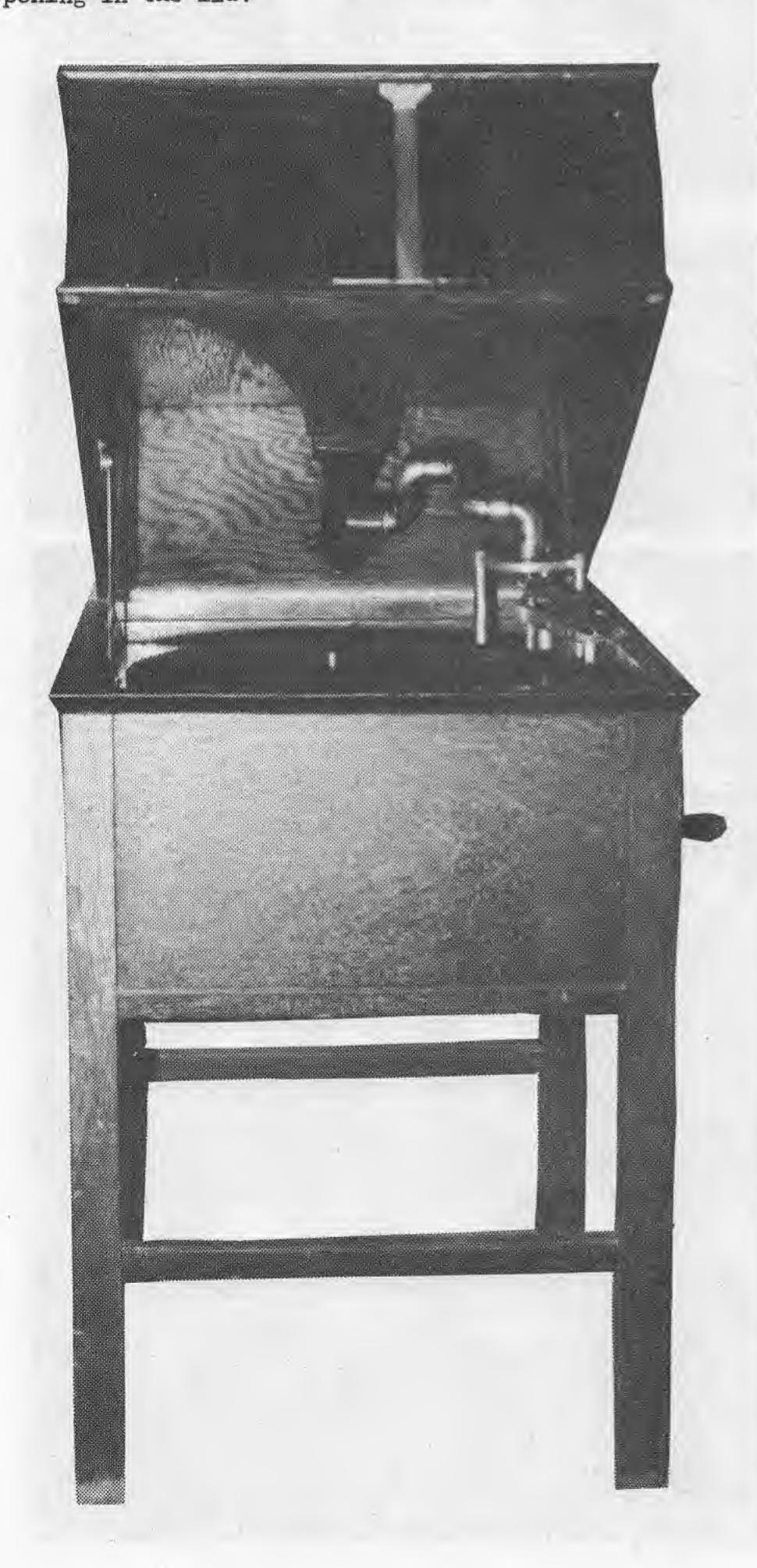
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Curiosity

A Vitaphone Variation

George Paul's "Phonograph Forum" in our issue #62 featured the unusual Vitophone phonographs with their solid wooden tone arms, and a number of different models were illustrated (including one with a wooden Music Master horn).

While no one has determined how many different models were actually produced, Tom Rhodes has come up with a photo of a floor model not previously shown. This one is a rather plain and boxy affair, with no provision made for record storage. Like other floor models pictured. however, this one also has its horn opening in the lid!





The Complete Regal Catalogue, by Arthur Badrock and Frank Andrews.

In England, unlike the U.S., the disc record buyer of the 1910s had dozens and dozens of brands to choose from. Many of these were cheap imports from Germany, causing the major companies to fight back with budget labels of their own. Early in 1914 Columbia launched its "Regal" record (totally unrelated to the U.S. Regal, which was initially an Emerson product of the 1920s). The initial release of several hundred titles consisted of recycled and repressed English Columbias; and, not unlike U.S. recycled Columbia products (Standard, Diamond, etc.), the Regal label occasionally appears pasted over an original Columbia. This purple label Regal was so successful that it lasted nearly 20 years before merging with Zonophone, and examples do turn up occasionally in the United States and Canada.

During its lifetime Regal used many U.S. Columbia recordings. The early years saw artists including Ada Jones, Collins & Harlan, George Alexander, Grace Kerns, Vess Ossman, etc. Even Prince's Band appears occasionally, cleverly upgraded to "King's Military Band"! Later issues drew from acoustic and electric U.S. Columbia, as well as the 1920s Harmony subsidiary. Artists here range from Fletcher Henderson to Vernon Dalhart, Fred Rich, James Melton, Rudy Vallee, Ted Lewis — even Riley Puckett.

But it was, of course, as a showcase for British artists that the label excelled. Buyers could almost get their fill of dance bands, popular and standard artists, music hall performers, and municipal bands on this label alone during its existence. There was even a small series of 10 3/4" records by John McCormack, pressed from early Odeon masters. Curiously, they were available after the Regal-Zonophone merger up through the early 1940s!

Messrs. Badrock and Andrews have done an outstanding job of detailing over 4000 discs issued between 1914 and 1932. In addition to matrix numbers and takes, issue dates, composer credits, and deletion dates, they have also cross-referenced each entry if it came from another source (such as English Columbia, American Harmony, etc.). There is also a label history, a complete artist and matric index, identification of pseudonyms, a variety of label designs, etc., etc. The only complaint I have (other than the records themselves not turning up often enough!) is the book's cheap and inadequate binding.

The Complete Regal Catalogue is a massive work of nearly 375 pages and is published by the City of London Phonograph and Gramophone Society. Inquiries may be directed to: George Glastris, 24 Washington Street, Brighton, England BN2 2SR.

The Collector's Guide to Victor Records, by Michael W. Sherman.

Five years ago Mike Sherman broke new ground with his small handbook, The Paper Dog. Almost immediately, additional information began pouring in, and the work has now been significantly expanded (by over four times!) to the present book. Its main purpose is still to be a handbook for the basic Victor label designs used on 78 R.P.M. records over the decades, and a series of helpful charts and graphs augment this information. (I might add that proper acknowledgment of the blue "Scroll" label appears as well!) All the fine points and many of the subtle changes throughout the years are noted, so the collector can readily identify and date the various pressings made by Victor.

The new version, however, is significantly expanded in all the other areas of the label's history and evolution. We have an excellent Berliner history with illustrations, as well as an expanded history of Eldridge Johnson's entry into the record business. We also have a pioneering, though brief, illustrated study of Zon-O-Phone, which eventually became a Victor subsidiary. Sherman also includes some (though not all) of the subsidiary labels produced by RCA Victor, such as Bluebird and Electradisk. Then there is a wide array of specialty, promotional and personal labels which are found much more seldomly. The extensive use of color is especially effective here, from the tri-color Mexican issue to the beautiful and rare "pattern labels" from pre-1910 which never went into production. The two-page spread of oriental labels in full color is truly amazing -- ever see a blue "Patents" Victor with the patents themselves in Chinese??

There are also sections devoted to additional products such as picture records, puzzle records, children's records, album sets, etc., etc. Sherman also discusses some of the celebrity and political records, while another section shows the evolution of Enrico Caruso's legacy. Think of it...an artist who has never left the Victor/RCA catalogue since his introduction in 1903!

The gremlins have introduced a few minor mistakes, but the overall work is a fine and valuable addition to every record collector's library. The Collector's Guide to Victor Records is 176 pages (soft or hard cover) and is available by contacting the author at Heritage Capital Corp., 100 Heritage Plaza, Highland Park Village, Dallas, TX 75205-2788.



Show Music on Record, by Jack Raymond.

Another pioneering work has recently been revised and expanded significantly to include not only another decade since the original work was published, but newly discovered recordings as well. The new edition remains essentially the same as the original, using Raymond's unique indexing system to locate various musical shows (stage, screen and television) throughout the years. All known commercial recordings, including reissues, are then listed, and various indeces make locating additional information much easier. There is also an extensive bibliography which lists over one hundred works related to the subject.

However, it is with the earlier years that most of us collectors are especially interested in, and in

almost every case the listings have been expanded. For example, the year 1896 had only seven entries in the old edition; there are now thirteen. When we get to the 1920s, there is almost an explosion of new listings. Perhaps the most significant additions, though, come with the recently discovered cylinders by DeWolf Hopper and Edward M. Favor from their 1890 shows, "Castles in the Air" and "Ship Ahoy," respectively.

This is a serious reference work for the collector who is serious about collecting "original cast" recordings. There is very little text and, unlike the original edition, absolutely no illustrations.

We are happy that through Jack Raymond's dedication and persistence, it looks more and more likely that a multi-CD set will soon be released which will cover all known available original cast recordings up through 1919 -- an excellent companion to the revised edition of the book.

Show Music on Record, The First 100 Years, 429 pages, is available from: Smithosinian Institution Press, Dept. 900, Blue Ridge Summit, PA 17294.



HERE & THERE



We were saddened to learn of the death of veteran collector John Doulou, at age 62. Many of our readers have his tapes on the pioneer recording artists, but John's proudest achievement was the "Billy Murray Musical Biography," which went into well over thirty volumes. John was a dedicated as well as generous collector; some of his collecting reminiscences appeared a few years ago in the GRAPHIC under the title "Ragtime Temple Bells." The future of his tape series and the Billy Murray Fan Club is currently uncertain.

In the last issue we made some comments about the current status of the single record, i.e., the 45. Richard Gesner (whose collectors' record shop Manchester...Manchester located in Manchester, N.H. just celebrated its 5th anniversary) tells us that many singles are still being manufactured, but most stores are not carrying them because the companies have a no-return policy. Also, there is more money in CDs and the cassette singles. However, Gesner will not stock these "cassingles" because after a dozen or so plays the tape begins to stretch, and the sound is terrible.

Reader Frank Moon passed along an ad from his local city paper for a 1917 Victrola, complete with needles and 25 lps. He wondered what one of these records would sound like when played on this particular talking machine! Our guess is that this was a case of mistaken terminology...not unlike the people who call 78s "albums."

Our subscriber Peter Burgis of New South Wales has begun a series of cassette reissues of historic Australian performers on the Kingfisher label. Of interest to GRAPHIC readers is a 2-cassette set by Billy Williams, plus recordings of compositions by Alex Lithgow, "Australia's March King." Future releases will include Florrie Forde, Albert Whelan, Nellie Melba, Percy Grainger and, of course, Peter Dawson. For more information, write Peter at P.O. Box 1660, Port Macquarie, N.S.W. 2444, Australia.

Finally, the Delaware State Museums announce the reorganization, expansion, and reopening of the Johnson Victrola Museum in Dover. For more details, contact Ann Baker Horsey, Curator, P.O. Box 1401, Dover, DE 19903, or call (302) 739-5316.

RECORD CLEANING WITH THE DISC DOCTOR'S MIRACLE RECORD CLEANER Shellac 78s, Edison Diamond Discs, plastic 78s, LPs, & 45s

H. Duane Goldman, M.Sc., Ph.D. (Chemistry) 1820 LaSalle St., St.Louis, MO 63104-2934, (314) 621-3029 George A. Copeland, 4016 N. 25th St., St. Louis, MO 63107-2736

The same goals of less record wear and better sound which led to research on steel needles and record materials have also forced us to investigate the problem of dirty records.

Whether you collect Edison Diamond Discs, shellac 78s, 45s, or LPs, with the demise of 45 and LP record production, the records you add to your collection will be "used". Most records you buy are likely to be afflicted with a wide range of dirts and contaminants; even mold and mildew growth.

Contaminants between the groove and the steel needle or diamond stylus playing it act as an abrasive. With the tremendous per square inch pressures exerted on the record during playing, any foreign material will act somewhat like scouring powder. The result is unnecessary, excess wearing of the record and of the needle or stylus used to play it.

The sound quality is less than the best possible because the best sound is dependent upon a correctly shaped needle or stylus point being in direct contact with the groove modulations at all times. Anything in the way will be reproduced as noise and will prevent the closest possible contact between the groove modulations and the needle or stylus. Dirty records produce inaccurate, extra-noisy sound.

The requirements for a cleaner that would safely clean any type of disc record are quite strict:

- Be safe for use on the phenolic resin surfaces of Diamond Discs, all types of shellac records, and all types of synthetic plastic discs (vinyl, filled vinyl, styrene, and other formulations, such as Victrolac).
- 2) Not leave any residue on the record after the cleaning process is completed.
 3) Not contain isopropyl alcohol, which would act as a solvent if used on shellac pressings. It also would cause the leaching out of plasticizing elements in synthetic plastic pressings which would make them more brittle. Such embrittled grooves are less able to withstand the pressures of the stylus and the hardened surface will tend to wear rather than to "give" a bit as the stylus passes by.
- 4) Readily clean away all the contaminants usually found on records, whether they are gritty, sticky, or greasy.
 - 5) Clean away mold or mildew growth and kill any spores to inhibit regrowth.

After 9 months of additional testing on shellac and plastic 78s, we firmly believe that a safe, effective, one-time cleaning solution has been developed. We have cleaned hundreds of records to complete satisfaction. In no case could we detect any harm to the record nor could more contaminants be removed from a once cleaned record---if cleaned using the proper procedure, one cleaning is all a record will ever need. Just keep it free of dust and fingerprints, and brush it before and after playing with an appropriate brush, and it won't need to be cleaned again.

THE DISC DOCTOR'S MIRACLE RECORD CLEANER is an extra strength formula available in pints, quarts, and gallons. It takes about 1/2 teaspoon per side and can be used to clean shellac 78 rpm and Edison Diamond Disc records, as well as LPs, 45s, and plastic 78s. A kit of inexpensive brushes necessary for proper wet and dry cleaning of shellac 78 rpm records and Edison Diamond Discs has been assembled. Brushes suitable for cleaning plastic 78 rpm records, as well as 33 1/3 and 45 rpm microgroove records are also available. In addition, a solution specifically formulated to clean CDs has been developed. The second part of this article will discuss the details of manual and machine-assisted record cleaning, including suggested procedures, cautions and appropriate supplies.

PART 2: RECORD CLEANING WITH THE DISC DOCTOR'S MIRACLE RECORD CLEANER

SHELLAC PHONOGRAPH RECORDS

- 1) 78 rpm laterals, such as Victor, Columbia, Brunswick, etc.
- 33 1/3 rpm Victor "Program Transcriptions" pressed in shellac.
 78 rpm verticals, such as those made by Pathe', OkeH, Paramount, Vocalion, etc.

Exceptions: 78 rpm records made of vinyl, filled vinyl, or other plastics, as well as those 33 1/3 "Program Transcriptions" pressed in Victrolac, should be cleaned with brushes and procedures suitable for fine groove 33 1/3 and 45 rpm records. EDISON DIAMOND DISCS are not shellac---see separate instructions below.

All records in your collection should be cleaned before you play them again, and all records you add to your collection should be cleaned before you first play them. After the record is thoroughly cleaned, all you need to do is keep it free from dust, fingerprints, and any other foreign material. ONE cleaning is all that is required. For longest record life, always dry brush shellac records before and after playing.

Proper cleaning procedures are vital. Extensive tests have shown that the following method for manual cleaning produces superior results while providing excellent insurance against record breakage and label fading. It also does the job with a minimum of additional cost for materials and equipment.

WHAT YOU NEED TO GET STARTED: [Items (4) and (5) can be eliminated when machine cleaning.]

- brushes for wet and dry application (1 or 2 of each): only The Disc Doctor's brushes which are matched to the record size and surface are recommended for safe and efficient cleaning.
- 2) distilled water (or equivalent) and three clean containers
- 3) bottle: about a pint in size, to dilute <u>CLEANER</u> when necessary 4) soft cotton rags (or toilet paper, the cheap non-fuzzy kind)
- 5) soft, clean wool: four pieces about 6" sq.---cashmere is best
- 6) dish drainer: common vinyl-covered wire unit with drain pad

PREPARATIONS

- 1) Work Surface: the platter of a record cleaning machine or for manual cleaning a flat firm surface such as a kitchen table. With the record supported evenly from beneath, you can press on the record during cleaning without danger of breakage (be careful with dish-warped records, however). A smooth surface under the record is needed to avoid scratching it. A piece of heavy plastic table cloth or oilcloth will protect the record and prevent wetting the table itself. The ideal work surface for manual cleaning is one of the heavy rubber mats that were sold as work stations for the cleaning of LPs. They have channels (as do the drain pads accompanying the plastic-covered dish drainer) which catch excess water and help prevent wetting the underside of the record.
- 2) Solution Strength: THE DISC DOCTOR'S MIRACLE RECORD CLEANER is supplied in extra strength, suitable for cleaning most of the records you are likely to find. PLEASE NOTE THE FOLLOWING EXCEPTION: Pre-1910 shellac pressings are made from poorly refined materials. To safely clean these pressings, use a solution consisting of 1 part CLEANER to 2 parts distilled water.
- 3) Pre-brushing: before starting the individual cleaning, stand each dry record to be cleaned vertically on a piece of paper and dry brush the grooves and labels with the DRY BRUSH. This removes loose dirt and debris.

4) Rinse Water: have two of the clean containers handy, filled with warm distilled or filtered water. Put one square of wool in each. Designate one as "first rinse" and the other as "second rinse".

CLEANING PROCEDURE

- With the record placed flat on the work surface, apply sufficient CLEANER to dampened WET BRUSH (1/2 teaspoon, approx. 2 ml is generally sufficient). Work the CLEANER into the grooves with the dampened WET BRUSH. Avoid wetting the record label.
- 2) Sop up CLEANER with a piece of wool and squeeze into the third container {NOTE: if cleaning pre-1910 or extremely dirty, greasy, or moldy pressings, it may be necessary to repeat steps (1) & (2) up to this point}. With either a second dampened WET BRUSH or piece of wool, work 1/2-1 teaspoon of the "first rinse" water well into grooves. Avoid wetting the label. Wring out wool and sop up rinse water.
- 3) Dry off the record grooves with a piece of suitable cloth or the cheap toilet paper. Use this slightly dampened tissue to wipe the label. NOTE: some labels will tolerate getting wet better than others. This procedure provides excellent protection. OkeH maroon and Victor Red Seal labels are especially likely to fade. Center-start Pathe' records have etched label areas which must be kept dry or the filler pigment will wash away. Always remove excess water from labels with patting, not wiping.
- 4) Rewet record grooves with the wool and water from the "second rinse" container. Avoid wetting the label. Work rinsed WET BRUSH into surface. Wring out wool and sop up water from grooves. Dry with suitable cloth or cheap toilet paper and give the label another gentle patting.
- 5) Brush the grooves with the DRY BRUSH, and follow by buffing with a fourth piece of wool, which has been kept dry.
- 6) Dry work surface. Clean reverse side of record as above and place in the dish drainer to dry thoroughly before a final DRY brushing and storage.

Cautions for Edison Diamond Disc Records: The cleaning procedure recommended for 78 rpm shellac records also produces excellent results with Diamond Discs. Extra care must be taken to avoid wetting the outer edge and the spindle hole (areas where the record core is exposed). Also avoid wetting the paper labels as the top printed label is glued to the pressed-in underlabel. Immediately sop up any liquid that accidently touches these areas. Never immerse a Diamond Disc. After cleaning and wiping dry, allow records a full 24 hrs. air-drying before storing.

PLASTIC PHONOGRAPH RECORDS

The general directions for cleaning 78 rpm shellac records also apply to the cleaning of 78 rpm vinyl, filled vinyl, various other plastics and Victrolac pressings, as well as microgroove 33 1/3 and 45 rpm records. Brushes used to clean shellac records must not be used to clean plastic records and vice versa. The extra strength CLEANER is completely safe to all plastic surfaces tested. Normally, plastic records do not require a pre-brushing and average condition discs may be efficiently cleaned with a solution consisting of 2 parts CLEANER to 1 part of distilled water. Using a properly configured brush it is possible to remove excess solution with a squeegee-type action and to sop up the remaining liquid with a soft, cotton cloth, followed by air drying. Cleaning is completed by brushing the dried record with a clean carbon-fiber brush and storage in a fresh sleeve.

COMMENTS ON MACHINE ASSISTED CLEANING

Unquestionably the cleaning of large numbers of records is greatly facilitated by the use of a modern machine which combines a high torque motor for platter movement (shellac 78s require proper platter support to prevent breakage) with vacuum assisted removal of CLEANER and rinse solutions. The only accessories needed are brushes suitable to the record surface (this applies to those needed for cleaning, rinsing, and the vacuum source). Air drying followed by the application of a clean carbon-fiber brush for plastic records, or suitable dry brush for shellac pressings completes the cleaning process. The use of new record sleeves is highly recommended.

THE DISC DOCTOR'S MIRACLE RECORD CLEANER:

Pint \$15.50 plus \$3.50 postage Quart \$24.95 plus \$4.00 postage Gallon \$44.95 plus \$5.50 postage

THE DISC DOCTOR'S MIRACLE RECORD BRUSH:

For Wet Brushing

- A 12" LPs; best for pre-1940 12" 78s with larger labels, & 33 1/3 rpm 12" Victor "Program Transcriptions".
- B 45s; best for 7" LPs & 7" 78s.
- C 12" 78s.
- D 10" 78s; best for Edison Diamond Discs. First choice for universal cleaning of 78s, regardless of size.
- E 10" LPs; best for pre-1940 10" 78s with larger labels, & 33 1/3 rpm 10" Victor "Program Transcriptions".

For Dry Brushing

- E Best general purpose size for pre-cleaning and final dusting of records; may also used before and after regular play.
- Wet & Dry brushes are sold in pairs and include a set of replacement pads. Postage is included with any order of CLEANER, otherwise add \$ 3.25. Sizes A), C) and F) are \$16.50/pair; sizes D) & E) are \$14.75/pair and size B) is \$11.75/pair. A single Dry brush is \$8.25 when purchased with any pair of Wet brushes, otherwise add \$.50.

The most economical, complete set of brushes for cleaning 78s in reasonable condition consists of a pair of WET brushes <u>D</u>, and one DRY brush <u>F</u> (for final dusting after cleaning and during regular play) and costs \$24.75. Less well cared for records should be dry brushed before wet cleaning. We recommend either an additional Dry brush for this purpose, or a 2-4" paint brush with soft, tapered bristles.



WITH THE EDISON PHONOGRAPH

If you intend to spend your vacation near the water or on a launch or yacht, you should surely take a Phonograph with you.

Music on the waters has a charm all its own. The sounds of voices or instruments are softened and sweetened in the open, and the surface of the water reflects the pleasing harmonies far away to the cottages along the shore.

Calendar of Events

A Note to Advertisers:

The next issue (October) will be the last one before Christmas.

Please plan your advertising accordingly.

* * *

August - "Entertaining with the Edisons." Visitors to Thomas Edison's home, Glenmont, can glimpse the social side of Thomas and Mina Edison through a special tour offered by the Edison National Historic Site. The tour focuses on the formal parties and special family events which were a feature of the Edisons' life at Glenmont. For recorded information, call the Site at West Orange, N.J. at (201) 736-5050.

September 13 - Phonograph Day at the Edison National Historic Site. Continuous phonograph demonstrations from 11:00 AM to 4:00 PM. Information: (201) 736-0550.

September 27 - Lynn Bilton's automated music show at the Holiday Inn North at New Jersey's Newark International Airport. Contact Lynn Bilton at Box 25007, Chicago, IL 60625. (See ad in section 2 of this issue)

October 4 - "Behind the Scenes at the Labs" - Join one of the Edison Site's curators for a VIP tour of the laboratories; see things you've never seen before! Special tours throughout the afternoon. For details and reservations, call (201) 736-0550.

